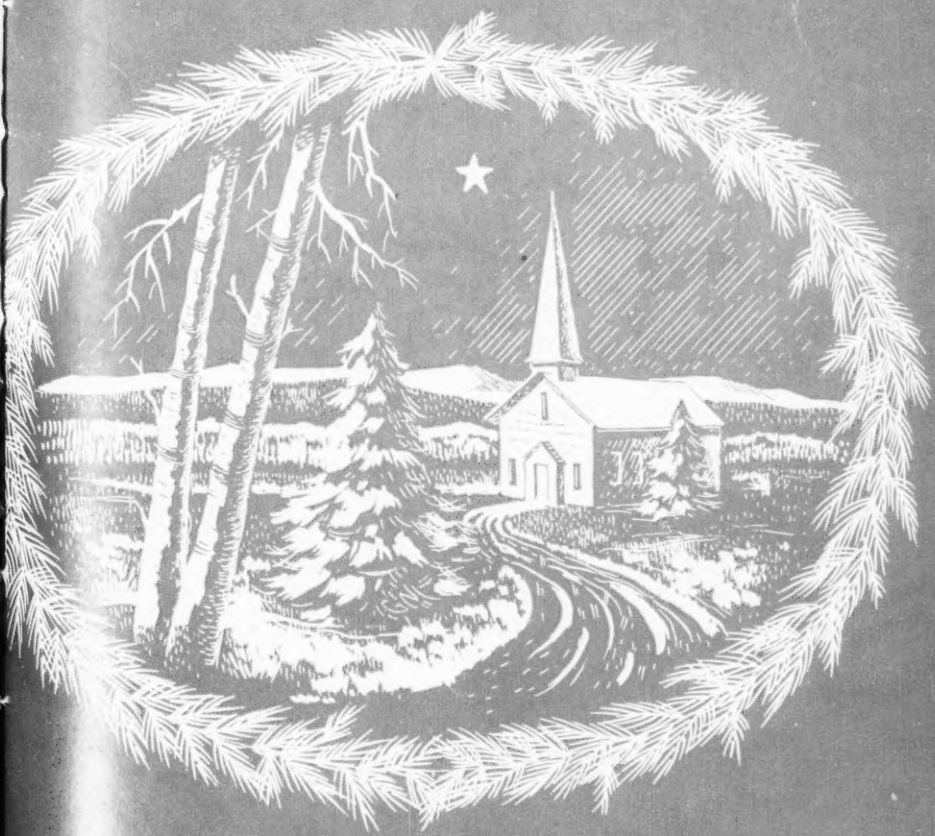
DECEMBER 1953

ARMY INFORMATION DIGEST



Christmas, 1776

One of the brightest examples of our Nation's ability to "rise and fight again" occurred on Christmas Day, 1776. That December was one of the darkest, most discouraging periods for the little army under Washington. After defeats around New York, it retreated across New Jersey, only a jump ahead of the British. Reaching the Delaware River, Washington had all the boats picked up for miles along the banks and managed to cross in them and to keep the enemy from doing the same.

Ragged, cold, and short of everything, the Continentals went into camp a few miles beyond the river. Most of the men had almost finished their "hitches," and Washington knew that something had to be done or the American cause was lost. The British had left a force of hired foreign soldiers, called Hessians, to garrison Trenton, and Washington guessed that they would be celebrating Christmas night. He decided to try a surprise attack on them in the night, which is one of the most difficult of military movements, in order to catch them off their guard.

While the Hessians drank and sang that rainy Christmas afternoon, the Continentals stood in ranks, hungry and shivering, and heard some words, written a few days before by Tom Paine, that have became famous: "These are the times that try men's souls. The summer soldier and the sunshine patriot, will, in this crisis, shrink from the service of his country; but he that stands it *now* deserves the love and thanks of man and woman." The men who listened were in no way summer soldiers, and the march to Trenton began.

When night came, the wind blew cold and snow fell. Silently, the tiny army of 2400 men was ferried through the cakes of ice by Glover's Regiment from Marblehead, sailors turned soldier. By the time they reached the other side, snow was falling thickly, but they marched through it for nine miles, and, at the first light, charged into Trenton. The Hessians, groggy and barely able to line up in the street, had no chance and gave up in less than an hour. The tide of the war was turned and the American cause was saved for a while longer.

Department of the Army Field Manual 21-13, "The Soldier's Guide"

ARMY INFORMATION DIGEST

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U. S. Army Photograph

EARL D. JOHNSON

UNDER SECRETARY OF THE ARMY

MOBILITY MAKES STRENGTH

EARL D. JOHNSON

"IN THE EVENT of war, we must have plans." These words have been spoken in every year and every decade of our history by our Nation's leaders. And while such plans are not made in a sense of expecting an inevitable, cataclysmic war, they must nevertheless be followed by a fulfillment which is calculated to prepare us for the eventuality of war without driving us to economic ruin.

Today, while much of our planning is concerned with the use of air power and air weapons, we should not underestimate the contribution of the foot soldier. He will have an inevitable and profound role to play in any future war which is forced upon us. His job is as old as history and is described best by the simple statement, "Somebody has to walk in—all of the way." However, the day will come when both his method of fighting and his appearance will differ considerably from the infantryman we have known in the past. Perhaps he will not have to "walk in all the way." The Army which in our memories was horse-drawn, then motor-borne should witness another important transformation in the foot soldier and his way of fighting in our time.

The word *mobility* best describes the key to all of our plans. We have learned that in an age of megaton weapons capable of producing megadeaths, any weapon which is gigantic, which cannot be disassembled, hidden and moved hundreds of miles will be in jeopardy because it lacks mobility in defense and surprise in attack. This applies to forces of men as well as to the weapons they use. Mobility in space and in time is the key not only to waging an actual war, but also to planning for it.

Our Nation is faced with potential battle fronts which are truly global, encompassing such vast mileages that our economy can never hope to deploy sufficient forces and materiel to protect all of them at all times under all conceivable conditions.

EARL D. JOHNSON is Under Secretary of the Army. This article is based on an address before the national convention of the Air Force Association.

Our relatively limited manpower is faced with unlimited manpower. While we in America produce weapons in restricted quantities, entire nations elsewhere are bent in labor to produce, store and deploy much greater stocks of war supplies.

This does not imply that our position is hopeless, but simply that we cannot win by trying to match them man for man. But if forced into war, we can win by being able to move rapidly on land, at sea and in the air. We can win by exploiting the strength which lies in American industry to contrive, operate and maintain the machinery of mobility. This strength is just now about to be tapped as America's fighting team begins to utilize the full potential of air mobility.

In our instincts for specialization, however, we must not become confused in our response to mobility needs. A jeep is a poor flying machine; an airplane is useless on the ground. Both have limitations when operating in areas of arctic ice, muskeg, swamp or jungle. Yet in past wars we have found ourselves in all of these places, dragging vast tonnages of materiel over ice, snow, coral reefs and beaches, with great spoilage and waste.

The key to our plans must be mobility—fast, dependable, ever-present capacity for land, sea and air mobility which is capable of confusing and outstripping enemy intelligence. We urgently need the means to deliver powerful forces of men and tons of materiel rapidly to any part of the world. The concept of envelopment—the tactical end run—in battle must be freed from the limitations of mud, mountains, morasses and even roads. It must be a surprise action by which our ground forces can be augmented, withdrawn or redisposed rapidly in all types of terrain. We must be able to hit three times for each blow received, thus increasing our manpower resources threefold.

All of us have vivid memories of the apparently unending quantities of Army supplies and the vast numbers of men which supported World War II and later the campaign in Korea. Inspired by these memories, the Army has embarked upon a program of lightening the load of the combat infantryman and the weight of weapons and equipment to support him. Why? Not just to ease the burden on his back nor to give him more personal mobility. These are important, of course, but it is more essential to make him and his tools air-liftable. Nor is this program being confined to the individual soldier's equipment. It is being extended to a host of support items, including ammunition, trucks, jeeps, large caliber guns and the like.

The familiar infantryman plodding through mud has become

an internationally understood symbol. Whether or not he remains mud-bound, whether or not we realize the potentials inherent in our weight-reduction program, depends in no small way on our air industry and its application to our problems. With its help, we should achieve skillful blending of the fighting man and his weapons with the airlift he needs for mobility.

This problem of becoming airborne and mobile is not just an exercise. It is a considered goal which we must attain. If war should come, an airlift capacity must exist which, on the one hand, is transoceanic so that we can deploy great distances and which, on the other hand, is capable of lightning assault. It is often said that the next war will be won or lost quickly. If this is true in any substantial degree, our preparation now and our planning for deployment must be reoriented. Preparation and planning based on D plus so many months becomes quite unrealistic. D plus so many days, or even so many hours, may be the correct and crucial basis.

Although history may show that the Korean campaign was indeed a strange one—limited in scope, unnatural in boundary, and a planner's nightmare—it did teach us some lessons. The Army has been compiling, studying and interpreting its experience there and gleaning new doctrine from it. Some of the facts are truly impressive.

Besides administrative flights, Army pilots alone flew about 500,000 hours in Korea, during which they undertook over 140,000 combat missions of reconnaissance and artillery spotting. In these sorties Army pilots showed in many different ways how aircraft can serve the soldier on the ground.

Another aspect of Army aviation which was firmly established in Korea was the use of helicopters for aero-medical evacuation. By the end of the campaign, the Army had airlifted more than 16,000 casualties from the battlefield. Helicopters proved themselves in yet another way—by actually moving hundreds of soldiers and hundreds of tons of supplies over difficult terrain in incredibly short periods of time.

Because of the helicopter's peculiar adaptability to Army needs, the Army is pressing, through every channel at its command, for further development of this important vehicle. How soon, how many and how varied the types will be will depend on the success of our present research efforts and the manner in which the helicopter industry meets the challenge of production.

In World War II and again during the Korean emergency, the Army turned to the civilian air fleet for assistance in moving

men and materials rapidly. The Pacific airlift for Korea, which commenced in July 1950, was largely supported by 60 or more commercial airliners and their crews. The Army is aware of this potentiality to assist us in time of emergency. However, we are also aware of another aspect of the use of civilian aviation which may not have been too well evaluated in our war planning.

The tempo of our life today is becoming faster. We used to think in terms of telegrams and letters as a means of transacting business. Today we think in terms of telephones, radio and airmail. This same change is reflected in transportation. The economy has moved from foot transportation to buggies, to automobiles, and today operates in terms of air travel speeds.

Air transportation is an integral part of our present day life and economy and one of tremendous importance. Think what it means if during peacetime we are geared to air transport, and yet we are planning on diverting that air transport to military use in wartime. It means that just when we want our industry moving at the fastest pace, we are going to remove from it a substantial segment of the civilian air fleet—industry's speediest means of transport. Therefore this question of how much military air transport lift we need in being is a problem which deserves the constant attention of our top planners.

When one talks about airplanes, no matter what the type, one immediately gets into the realm of large dollar signs. This is true whether you are airlifting men and materiel or bombs and weapons. Airlift is expensive. However, to appreciate the true meaning of the word "expensive," it is necessary to view it in proper perspective. Airlift of men and materiel as a result of poor planning is extremely expensive, for then we have let time overtake us to such an extent that we are forced to make haste wastefully. However, there are certain qualifications which it is essential to keep in mind.

Rightly or wrongly, under the philosophy we live by, we have turned the initiative in starting a war over to our potential enemy. With him holding the trump cards of "when" a war is to begin and "where" it is to be fought, and to some extent "how," we have placed ourselves under tremendous handicaps. We can offset this by one of two means.

Either we can distribute great stockpiles of equipment and men around the globe, much of which is bound to be at the wrong place at the wrong time, or we can depend on limited stockpiles and a limited number of well-trained men, with a capacity for moving them rapidly and effectively to the decisive

points of conflict. Couple this latter approach with the likelihood that we will have only D plus so many days rather than D plus so many months in fighting the war of the future, and the perspective begins to change.

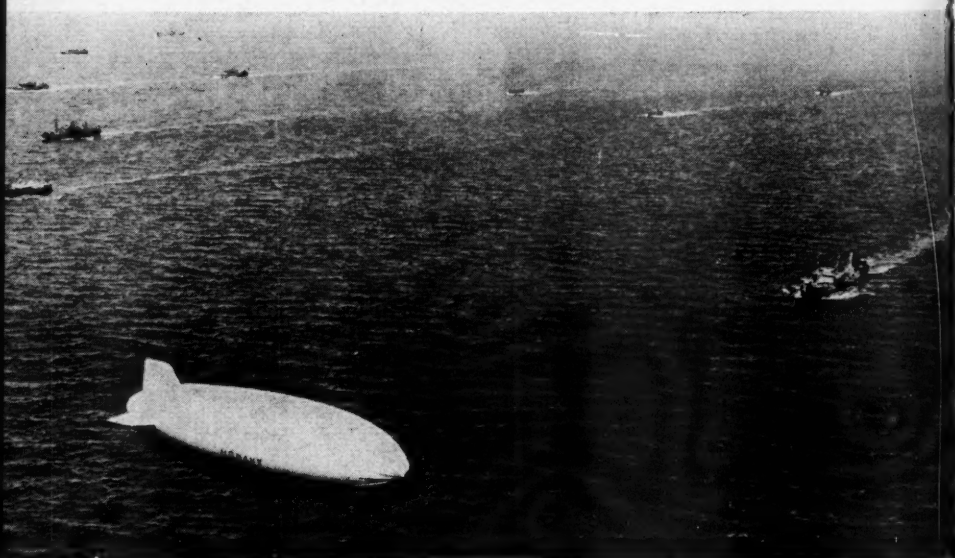
Perhaps limited stockpiling coupled with a high degree of air mobility, may ultimately prove cheaper. Moreover, such an approach has another great and important advantage; namely, the stockpile we *do* have can be much more cheaply and effectively kept abreast of new developments, whereas the cost of obsolescence of the mammoth inventories required by the other method is staggering.

Still another facet of the Army's operation, if geared to airlift, might appreciably affect our appraisal of costs. Within the Army alone at any given time, there are upwards of 100,000 people in a travel status. If these people could be moved by air rather than by surface transportation, and their travel time decreased by only 20 percent (a truly conservative figure), the Army would have available for duty 20,000 more soldiers than we currently have—more than an entire infantry division. There might be some increase in travel costs in moving large groups by air. However, the savings in personnel available would certainly offset higher costs.

These two examples help put the cost of airlift in proper perspective. There are other approaches, too, which can be equally fruitful.

Upon examining the potentialities of air mobility and its implications in Army planning, two broad conclusions emerge. The first is that the use of airlift may be the key to mobility of our ground forces and their superior striking power in future wars. The second is that the Army must continue its efforts to lighten the combat team load so that it may be carried more easily by air. Military planning is, in fact, already moving to incorporate this concept of air mobility in basic Army doctrine. The aircraft industry and our sister services must respond with aircraft and airlift capacity. Together the Armed Forces and industry can present so powerful a defense team to the world that the hope of indefinitely postponing a war may become a reality.

Supply ships are escorted for protection in submarine-infested waters. Below, a Navy blimp acts as lookout for a convoy, keeping a sharp eye for approaching subs. U. S. Navy Photographs



COUNTERATTACK ON UNDERSEA MARAUDERS

REAR ADMIRAL FRANK AKERS

IF THERE WERE any single turning point in World War II, it came in May 1943. In that month the Allied navies sent thirty-seven German submarines to the bottom of the ocean. From that date forward the Allies' radar and hunter-killer carrier task groups began winning the battle of the Atlantic supply lines. By the fall of 1944 the Germans had withdrawn from their submarine bases in the Bay of Biscay and had fallen back to ones in Norway, where they continued restricted operations only. And by the spring of 1945 their undersea ventures were in complete collapse, thereby removing one important barrier to the final Allied victory on land.

For the second time in the last half century the submarine had almost decided a major war. Fortunately for the United States in World War I, the Germans did not fully realize the capabilities of their *Unterseeschiffen* (U-boats) until it was too late. Even as the end neared, they sought to take greater advantage of the submarine's ability to escape detection while sinking Allied ships. The Kaiser's staff speeded production and by the time the Armistice was declared, they had more than two hundred submarines under construction.

The ever present possibility of yet another conflict calls for an evaluation of the submarine's chances in any third attempt. History reveals that no nation has lost a war while it maintained control of the seas. And today control of the seas includes not only the surface of the water, but the air above and the depths below. Today more than ever our global military effectiveness requires that vast quantities of strategic raw materials from all points of the globe be transported by surface ships to our shores. New weapons, too, demand an ever increasing quantity and variety of imported materials.

Conversely, to support our own Armed Forces overseas and

REAR ADMIRAL FRANK AKERS, USN, is Assistant Chief of Naval Operations (Undersea Warfare), Department of the Navy.

those of our allies, an outward flow of vast proportions must be carried over great distances. Not only must the initial movement of our troops with their equipage be accomplished, but a vast pipeline of communications must be maintained to keep them supplied with replacements, food, ammunition and other materiel. Immense quantities of gasoline and aircraft supplies also are required to maintain fighter and bomber bases overseas.

Consider some of the submarine's advantages in disrupting these supply lines. First, it has long been considered the ideal "poor man's weapon." Only a handful of submarines at sea will force the other side to commit a very disproportionate number of its own units for defense. Vessels must be convoyed, ships detoured and delayed, harbors defended and antisubmarine patrols established and maintained.

Moreover, the range and striking power of submarines have been vastly improved. Though the losers in World War II, they left the field with a dangerous threat for the future—the snorkel, which minimizes the chance of detection and thus adds to their lethal potentialities.

The goal of submarine design has long been to approach as closely as possible the "true submersible," a craft which can perform its mission like a fish, divorced entirely from the surface. At present, the submarine is still a part-time surface vessel which must maintain some sort of periodic contact with the surface in order to charge its batteries and replenish its air supply. Such periods involve either coming to the surface or nearing it with a snorkel breathing tube. Although the "true submersible" does not yet exist, the atomic-powered craft under construction will very nearly approach it.

Improvements have been made, too, in the submarine's principal weapon, the torpedo, and in wider uses of the craft itself —for launching guided missiles, for transporting assault troops, for reconnaissance and for supply of isolated garrisons.

To defend ourselves against this dangerous craft, special antisubmarine measures are required to hit the enemy whenever and wherever he appears. For in spite of its advantages, the submersible can be destroyed by intercepting it at various stages of its employment. Opportunities for attacking an enemy submarine occur during the building and fitting out stage, at its home base, while enroute across the high seas to its patrol areas, on sorties, during its approach to a ship or convoy, and finally, after it has fired its weapons.

Manifestly, if no submarines reached the sea the problem

would not exist. And while it is not possible to insure that every submarine of a determined enemy can be diverted or destroyed prior to the completion of its patrol sorties, it is nevertheless true that rendering even a percentage of them ineffective is sufficiently rewarding to justify considerable effort.

Attempts to stop a submarine before it ever gets to sea are made in several ways. The first blow falls even prior to construction. It consists of crippling or destroying factories which manufacture its various components and sub-assemblies. This is primarily a bombing phase. Concurrent air attacks on other targets, such as power complexes, oil fields and transportation facilities are also hindrances.

Some portions of the actual construction and fitting out of an enemy's submarines, and the basing of the craft after it is in operation, normally take place near the enemy's coastline, usually at locations heavily protected by air defenses. A fast carrier striking force is well suited for bombing and destroying these bases after obtaining control of the air in the vicinity.

The sortie phase commences when a submarine maneuvers to leave its base, traveling on rivers, through bays and narrow channels. It ends when it emerges on the high seas. Throughout this phase, additional defenses are employed against it including, but not limited to, minefields and barriers of killer-submarines.

Any enemy submarine which survives this gauntlet and enters the open sea takes a new lease on life, for its size relative to the ocean on and under which it travels is infinitesimal. A submarine at large in the middle of the ocean may not constitute an immediate threat, but its potential danger requires that continuous preparedness be maintained.

Thus it is that long-range air antisubmarine patrols and hunter-killer forces ply the broad expanses of the seas, seeking out and destroying. Their presence and capabilities, known to the submarine commander, cut measurably into his effectiveness. To elude these killers, the craft is forced to spend much time submerged between its surfacing or snorkelling periods. This adds considerably to its transit time to patrol areas and consequently reduces its time on station; it increases the psychological pressure on the crew and interferes with its performance. These are the high points of offensive antisubmarine warfare.

The defensive phase plays an equally important role. The lowly yet indispensable merchantman and his lofty transport cousin are herded into convoys for ease of protection and mutual support. They may be screened by groups of antisubmarine

A fast surface ship armed with depth bombs drops an explosive charge during a training exercise. U. S. Navy Photograph

aircraft carriers and other escort vessels ranging in size and potential from destroyers to coastal minesweepers and converted yachts. The strength of the screening force depends in a large measure upon the naval units available and the importance, size and speed of the convoys concerned.

Meanwhile defensive measures must deny an enemy submarine the opportunity to approach harbors, to attack coastal shipping, or to gain valuable intelligence and—in any future war—this interdiction must be expanded to deny the opportunity to launch guided missiles. Nets, listening devices, mines and patrol craft co-operate in this endeavor.

The techniques of antisubmarine warfare constitute without doubt one of the great examples of teamwork, in or out of military service, extant today. A typical hunt can include any

or all of the following units: long-range shore-based patrol aircraft, airships, independent antisubmarine surface vessels, killer-submarines, aircraft carriers with their attached carrier air groups, helicopters, and destroyer type escort screens.

Through teamwork, combinations of these units are able mutually to support one another and take advantage of the stronger points of each. The carrier plane, for example, can sweep vast areas of ocean and spot a submarine. The heavy weapons, speed, maneuverability and endurance of the destroyer member of the team allow it to press the attack to the "kill." In different geographical locations, and from forces available, various other combinations are chosen to produce the most efficient and economical teams.

Not only must each of these elements be a precision unit within itself, but it must also be indoctrinated, trained and polished so that it may instantly co-ordinate with one or more of the others in split-second offensive warfare. Such proficiency demands the utmost in individual, team and unit education, training and technical ability. Only by these means, coupled with prompt application of our best research and development efforts, can the threat of the submarine of today and tomorrow be contained. The threat is real, but it is one which has long been recognized and prepared for by our Navy.

Discipline is not, as some will say, a military whim invented to harass one's subordinates. It is the stern, exacting system that binds individuals into an indefatigable team. It is the most important inward ingredient in the building of unswerving, tough-fibred military character. Without it we can not acquire a proper military pride. Without it we can not achieve that much discussed but little understood thing we call morale.

Admiral Robert B. Carney
Chief of Naval Operations

YOU AND I, USA

ANDRÉ FONTAINE

Occasionally there comes to the attention of ARMY INFORMATION DIGEST a statement of a basic problem that is so forceful and true, that its effectiveness cannot be denied. Such an article appeared in June 1953 as *Armed Forces Talk 446.* Entitled "You and I, USA," it gives answers to the recurring question asked by many young Americans today—"Why should *I* serve?"

This statement by a former associate editor of *Collier's* magazine not only carries conviction, but is an excellent example of the information technique advocated by Dr. John A. Hannah, Assistant Secretary of Defense (Manpower and Personnel) when he declared: "Our Information and Education Program must be made unmistakably clear to the audience to which it is directed." As an example of this type of approach, the article is reprinted for those who may have missed it, and for re-study by those who have already seen it.—*Editor.*

IT WAS on a southbound train out of Chicago a couple of years ago and maybe the young private next to the window was talking so candidly because it was after midnight and the dozen or so other people in the car were asleep. He stared through the black windowpane and his voice was quiet: "I'm not trying to get out of anything, but it doesn't seem fair. You can't get farmhands these days and since I've been drafted Pop had to cut back the acres we have been planting by nearly half—he just can't do the work. I know a lot of guys who could go in and it wouldn't cost their families a dime. So why'd they have to take me?"

In Army, Navy, Marine Corps and Air Force installations all over the country, chaplains, noncommissioned officers and psychologists told me the same story: "The biggest trouble we have is that so many men do not want to serve. In a dozen different ways they all say the same thing—let somebody else serve. Why me?"

For over two years, while traveling the country digging up material for magazine articles, this question has been in the back of my mind. And I think I have some of the answers. I

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found them in unexpected places—from a psychiatrist, a college professor, an Army colonel, a movie, from veterans of World War II and, most of all, from the servicemen themselves. Here is what I learned.

In the first place, most men resent having military service break into the progress of their lives from school to jobs to marriage to children and to better jobs. In time of all-out war men are willing to accept this interruption, but in times of half-war or Cold War they resent it. They resent it because they are not convinced the sacrifice they make is necessary. When Pearl Harbor was bombed every American felt immediately, desperately threatened—and overnight everyone wanted urgently to do whatever he could. But the Korean attack was farther away and the threat was not to United States homes, but to United States ideals, and to the idea that the free nations must all hang together or they would all hang separately.

Many young men got the idea better than their elders. Said a Navy recruit in Bainbridge, Maryland: "Once Russia takes over a country we can't get it back. So we've got to keep the free countries out from under Russia's rule. If Russia keeps on, pretty soon we'd be all alone and we can't take on the whole world." Said an airman in Texas: "So far the United States has fought two World Wars and never fought at home. I figure it's better to whip a man off your neighbor's back porch than off your own."

At the Marine Barracsk at Camp Pendleton, California, the training people like to quote a Marine sergeant in Korea who wrote in a letter to his folks: "If ever I have to give my life to keep war from hitting close to home, it would be a cheap price to pay. If we don't stop them in Korea, where next will they strike? We just can't sit back and let the Communist threat engulf all the good we did all over the world, and only strike back when it strikes at home."

If young men are unwilling to serve, it is partly the fault of mistakes their elders have made and are still making. Said an Army colonel with 35 years' service: "The United States serviceman is the most important man in the world. Whether it is in Korea or Saudi Arabia or Germany he is the man who is out on the line defending the free world. Diplomats may negotiate, factories may produce guns, generals may command, but in the last analysis it is the man out on the perimeters all over the world who is protecting us. He ought to be on the cover of *Time* magazine as Man of the Year. He ought to be No. 1 in everybody's

book because he is doing the biggest job of all. But does anybody ever tell him how important he is? No—and the average guy doesn't know it."

Dr. William C. Menninger, psychiatrist and head of the famed Menninger Foundation, Topeka, Kansas, said it another way. "How does the average draftee leave home for the Army?" he asked. "With a group of other men he marches down to the station in the gray light of dawn. He is nervous and a little scared because he is leaving the place he has always known and heading for something he knows nothing about. The train pulls in and he crawls aboard; there is no band to tell him the town is proud because he is doing a job for everybody in it that no one else can do as well. Often there is not even a friend or relative to shake hands and wish him luck. Is it any wonder that he feels he is just an unlucky Joe who got a bad break from his draft board?"

Adults have made another mistake, too. Professor Max Wolff of Teachers College, Columbia University, who has spent a lifetime studying and working with young people in half a dozen countries, said recently: "No other country in the western world, including Latin America, gives its teen-agers so little to do that is important to their communities." Americans, he said, treat teen-agers like amusing toys that are to be admired and shown off to their friends with pride. We do not allow them to take a serious, responsible part in our adult world in spite of the fact that the most frequently heard cry from teen-agers is, "We have nothing to do!"

For example, he continued, no one in the country is as intimately concerned with military service as boys of 16 to 18—because they are the ones who are going to give two years of their lives to serving their country. But when we consider a law to draft 19-year-olds, no Congressman, no legislative committee ever thinks of giving the youths themselves a chance to say what they think about it. In every state except Georgia, we tell 18-year-olds that they are old enough to fight for their country, but not old enough to have a voice—a vote—in running it.

What it boils down to, said Wolff in effect, is this. We do not allow them sufficient opportunity to take responsibility right up to the day when we order them into uniform, then we complain because they do not instantly recognize their responsibility. It does not make sense.

A third reason why many servicemen resent being drafted is that neither they nor their parents appreciate some of the ad-

vantages that go with military service—partly because they are so busy resenting the disadvantages. Many of the advantages are intangible, like the fact that through their technical training, young men get a chance to try a particular line of work for size and see if it is something they would like to follow as a career. Or the other one that was pointed out by a lanky airman at Lackland Air Force Base in Texas. I had asked him what he thought about a new citizenship training course, called Hours on Freedom, and he had been telling me why he thought it was better than the old. Then he said: "But I think the guys learn more citizenship in the barracks than they do in any classroom. You're living pretty closely with all kinds of guys from all over, and you learn what they think and what their rights are and what yours are. You learn how to get along with people."

But military service has tangible benefits, too, that are generally overlooked. Chief among these is the chance for further education. More than 125 colleges give courses to servicemen right on military posts in this country.

Take the case of the young sergeant who went into the Air Force after one and one-half years of high school. He was stationed in a small town in Japan where he had a good deal of time on his hands. He wrote to the superintendent of schools in his home town, received an outline of the courses he needed for a high school diploma, then signed up for those courses through the United States Armed Forces Institute. When he had completed the courses he wrote to Southern Methodist University and received a similar outline. In four years of military service he completed five years of schooling, earned his high school diploma and, after his discharge, he entered SMU as a second-semester junior.

Or the other ex-soldier who was graduated from Tufts Medical School last year with the highest marks in his class. He owed his education, he told the Dean, to the Army. "I come from South Boston," he said, "and I have nine brothers and sisters. Pop didn't do bad, but with all those kids to feed we never had much money. I never even thought about college—let alone med school—because I knew it was impossible for me. But when I got into the Army I suddenly realized I could do it under the G.I. Bill. So I did."

"The high school and college diplomas that men can get in the service," said an officer who had watched them in action, "are negotiable documents that will buy them better paying jobs when they get out."

One of the charges you hear most frequently leveled at servicemen is that they are unwilling to serve because they do not appreciate the freedoms they have in this country and do not give a tinker's dam about the basic principles of democracy. This, I think, is nonsense.

While investigating the new citizenship training program, mentioned earlier, for *Collier's* magazine, I talked with hundreds of soldiers, sailors and airmen and saw the course in action at three different installations. The strongest single impression I carried away was that the United States does not have to worry about young men's devotion to democracy. Over and over again I saw its basic principles deliberately questioned so that in arguing about them and defending them the men would come to understand them better. Each time the reaction was terrific; it was as though you had pinched an exposed nerve.

At one of these citizenship sessions an officer read what sounded like an official order announcing that henceforth all churches on the base would be closed and all servicemen would be required to attend a single Armed Forces church. The order, of course, was a fake, but the officer had scarcely finished reading before the lid blew off the joint.

One man stood up and with tears in his eyes said, "You can't do this. It's just like the Reds—like Hitler. Why that's why I'm here, to stop stuff like this." Thirty or forty men roared agreement. Then another stood up. "Take it easy, guys," he said. "This is the Army. Why shouldn't we have one church? It would be more efficient, be easier to handle. I don't see . . ." Before he could finish another soldier had stamped down the aisle, grabbed him by his shirt front and cocked his fist. "You close your mouth or I'll knock your teeth out!" That was when the instructor stepped in and announced the order was a fake. But so violent was the reaction that the authors changed the course.

From this and similar incidents it was obvious to any observer that American servicemen are deeply devoted to the freedoms they enjoy. But very often they—and in fact the majority of Americans—do not recognize basic democratic principles when they meet them in their daily lives. They are so wrapped up in the particular situation that they do not see the principle behind it. So people think they do not care about it.

This happened in a town on Long Island a few months ago. The volunteer firemen were giving their annual fair at which they raise money for the department by running games of chance and wheels of fortune, with prizes donated by local merchants.

The fair is a lot of fun and almost everyone in the village turns out for it, but last year one man, a retired attorney, tried to stop it. He said the games of chance were illegal, a violation of the state law against gambling. Probably he was right—though some lawyers doubted it—but the people were in no mood to have the fair canceled.

One evening the attorney appeared at the fair and demanded that the games be closed. Within a few minutes a crowd of about 200 persons gathered, spearheaded by a score of teen-agers. They began to throw stones, pop bottles and fruit at the attorney. Slowly they drove him back until he took refuge in the doorway of his office, which happened to be nearby. Some of the stones broke windows in the building.

The attorney was at bay, with the jeering crowd ranging about 30 feet down the street from him. Two policemen, standing by, did nothing to halt the disorder. Then a man in his late twenties started pushing his way to the front. "Wait a minute!" he shouted. "This is all wrong! I fought four years in the Pacific in the last war and this is the kind of thing I was fighting against. This is mob violence. This is fascism!"

His action took the steam out of the crowd and reluctantly it broke up. But in all the 200 persons, the young veteran was the only one who recognized that they were a bush-league lynch mob and that they were violating one of the basic principles of democracy—the rule of law.

This is the big gap—the gap between believing in democracy and practicing it. It is the greatest weakness in our democracy. All Americans deeply believe in the great principles of our way of life—freedom of religion, speech and press, the right to bear arms, freedom from unreasonable searches and seizures, "nor shall [any person] be deprived of life, liberty or property without due process of law." But merely believing in them is not enough; unless they are put into practice day by day they are merely empty words written on a faded scrap of paper.

This is the demand that democracy puts upon each of its citizens. If some fail to answer the demand they cripple democracy; if too many fail to answer, democracy dies.

In civilian life nobody buttonholes you and says, "You must fight for freedom of speech or go to jail." The only force that makes a man take up that fight is his own sense of responsibility. Then why do we have draft boards that force men to join the Armed Forces—or go to jail? To many servicemen this question becomes much more specific: Why must I be the one to serve?

A soldier at Fort Dix felt this way before he took part in one of the Hours of Freedom. In this one the men were told that they were to act as a draft board, and were given a list of ten men, showing their qualifications. They were typical cases—a couple of college students, a professional ball-player, a defense worker, a chemist—and the men were told they had to draft six of the ten and defer four.

They spent nearly an hour arguing over which six to draft, for none of the cases were open-and-shut, any more than they are in real life. At the end of the hour they had picked their six men, and the soldier had learned something. "It's pretty clear now," he said, "why I'm here—the whole situation. Before I was a little wondering. A lot of men think that anybody who stays home is sort of shirking, but when he sees the whole problem—how important it is to the war effort that some stay home and work at their own job—he kind of changes his mind. I'm satisfied now."

Service in the Armed Forces happens to be the job for democracy that most young men can do best. Most old men cannot stand the physical beating of combat. Some men with special training or experience can help their country more in civilian jobs. So the draft boards have to decide who is most valuable in which spot.

It is obvious we are going to need a big Armed Force for a long time, and we cannot get it through volunteers alone. There is no answer except to draft just about every young man who reaches draft age.

Service is not an obligation that has been unfairly foisted upon this generation of Americans. The young men of every generation have had to fight. We Americans are accustomed to think that war is something unusual, that peace is the natural order of things. But the facts of history say otherwise. From the Revolution in 1776 down to date the average length of time between major United States wars had been 22 years—or one every generation.

Military service has always been the young man's job—part of the price he pays for the freedoms that are his. In other countries—in Soviet Russia, Nazi Germany, Imperial Japan—other young men have paid the same price for no such freedom. Older men pay with a different coin, but they pay.

We always have had and still do have men who would give up their sons to war, but not their profits, public servants who use their power to fill their own pockets, the me-firsters, the

demagogues, the draft-dodgers, the lazy, and those thousands who "don't want to get involved"—without realizing that by "not getting involved" they are lining up against democracy. Each of these weakens democracy and if the day ever comes when they outnumber the rest, America will lose its liberty.

Consequently what it boils down to is this. If you value your freedoms you have to make the sacrifices that will keep them no matter how many others shirk. This is true for all men and women in a democracy for all their lives. It is a personal thing. The obligation to serve may take any of a thousand forms, the demand may be for a man's life, for his money, for his reputation or for two hours of his time. But if the demand is made, and if he believes in his nation, he must answer it.

One of the most dramatic stories of this demand was told in the Stanley Kramer movie *High Noon*, which stars Gary Cooper. Cooper plays the part of a United States Marshal in a small western town a century or so ago. As the picture opens he is being married and he turns in his badge, preparing to leave on his honeymoon. But a couple of hours before train time he gets word that a murderer whom he had captured had wangled a political pardon and was due to arrive in town on the noon train. At the station the killer's brother and two of his gang were already waiting, for the murderer had sworn to kill both Cooper and the judge who sentenced him.

Cooper has every reason to duck out. He is no longer Marshal, he has done his job dangerously and well and now is due for a rest. Furthermore, his wife tells him she will not live with a man whose life is constantly threatened and that unless he comes away with her their marriage is finished. The judge packs up and gets out, telling Cooper he would rather be a live nobody than a dead judge. A retired Marshal, broke and bitter, advises Cooper to get out while he can—that a man gives his life to enforcing laws and nobody cares, that when he gets old nobody remembers and his only reward is the right to starve.

But Cooper figures if he runs away now he will never stop running, and a man cannot live like that. He puts his badge back on and sets out to recruit a posse to meet the killers. He goes to a meeting in the church where most of the townspeople are assembled and asks for help. In a tremendous scene that reminds you of things you may have seen before, the men tell all the reasons why they cannot help. They are good reasons. The minister says there has been enough killing. One man says a big company has been thinking of putting up a factory in town,

a factory that would mean many jobs, but that if there is gun-fighting in the streets the company will think the town is uncivilized and will put the factory elsewhere. Another man says the killer is none of their business—Cooper caught him once and if the crooked politicians upstate let him go then he is their problem. At the end of all the talk no man is willing to go with Cooper to meet the killers.

The reasons were good, but not good enough. Cooper knew that you cannot appease a tyrant or a gangster, and that if the killers were not stopped now they would take over the town and the people would lose their freedom. So he meets the killers alone and defeats them.

It is men like this, laying their lives, their brains, their reputations, their families, on the line, down through the years of our history, who have bought the freedoms we have today. Most of them do not get to have movies made of their stories. And right now in a thousand cities and towns and half a hundred foreign countries other men are doing the same thing without any glory or even much notice.

There was one I ran into a few months ago on Long Island. This man—call him Mr. Greene—went to dinner at a neighbor's house one night and when the talk got around to local affairs one of the guests, "Mr. White," remarked that "Mr. Browne," a fellow-townsman, was a Communist.

Several days later Greene received a phone call from Browne's lawyer. "Browne is suing White for slander," the attorney said, "but before we begin to make a case we have to be able to prove that White called him a Communist. We would like you to testify that he did."

"But I don't know whether Browne is a Communist or not," Greene said, "and I'd rather not get involved."

"I know you don't," the lawyer replied. "We're not asking you to say whether or not he's a Communist; all we're asking is that you testify to what you heard White say."

Greene did some quick thinking. He had only been in the town for about six months and he was just getting settled. His wife was learning to know her neighbors and he was beginning to get acquainted with the men around town. This Communist business was dirty—if a man got mixed up in it even a little bit he was liable to get a bad reputation.

"No," he told the lawyer, "I won't testify."

Off and on all afternoon Greene thought about it. Supposing Browne was not a Communist—he could be badly hurt by this

because today any man can be hurt by being called a Red. He thought Browne ought to have a chance to prove it one way or the other. Well, in court it could be proved. But if he refused to testify, Browne would not have the chance to take it to court.

That night, before he went to sleep, the question came back to bother him. He told about it later: "I knew perfectly well that it was my duty to testify, but I didn't want to take the risk of getting hurt. Then I got to thinking about the war—I was a radio-gunner on a B-26—and I remembered how I felt then. I felt that we were fighting for democracy against totalitarianism and I believed the fight was right and necessary. All of a sudden it seemed to me that if I now refused to do my duty, no matter how unpleasant it might be, then the whole fight would have been for nothing."

The next morning he called the lawyer and said he would testify. He did—along with others who had been at the party—and Browne won; White was ordered to pay $1000 damages.

Greene knew that a man's obligation to his country often involves risk, both in battle and in civilian life, but if he believes in it he has to take that risk. He cannot wait for the next man to do it.

Nor can a man always wait until conditions are ideal before he makes his fight—he has to take it where and when it comes. Everybody knows there are things about the Armed Forces that gripe the men who serve in them. Most of them stem from the fact that Americans are brought up to believe in democracy and an army or a navy is not a democratic organization—and most people think it never can be.

But neither are a lot of other organizations. There are plenty of jobs in business, educational, professional and even religious organizations, where you get told what to do and you cannot answer back. But it is still a long way from Russia where you cannot change jobs or take a trip unless they let you, or pick up a phone without having an MVD man listening; where you cannot buy yourself a sport jacket because the mills are too busy turning out uniforms, or take in a good movie because they do not make them, or join a free union because all unions are run by the state; where they train children to spy on their parents, where you can get arrested for talking to a foreigner, where you cannot trust your friends because one may be a police spy and you cannot believe anything you read in the paper or hear over the radio because it is all government propaganda.

Our democracy is not perfect. But in most ways it is better

than it used to be, and certainly it is better than what most other countries have to offer. If you want to keep it that way you have to work at it. And the job for most young men is to defend it, on the firing line if necessary, against those who are dead set on destroying it.

On this point S. L. A. Marshall, author and military analyst, distilled his experience in two World Wars into a single sentence. In *Men Against Fire* he wrote: "To men who have been long in battle and have thought about it deeply, there comes at last the awareness of this ultimate responsibility—that one man must go ahead so that a nation may live."

When I consider Marshall's observation, I wonder whether this awareness of the responsibility of one man to his nation can come also to a person who is not on the field of battle. Must ardent patriotism be forged only in the flame of open military conflict? I believe not.

I believe that right now, and probably for a good many years, Americans must answer for themselves two questions. The first of these is: Why should *any* American be serving *anywhere* overseas? The second, which must be answered by every able-bodied young American, is: Why should *I* serve in uniform?

The answer to the first question not only must be reduced to its clearest and simplest terms, but must be generally understood and agreed upon by Americans everywhere—from teen-agers to septuagenarians. Without *general* understanding and agreement on this, Americans can expect the average serviceman to be uncertain about the actual degree of his responsibility to serve his Nation. If he is doubtful about our national aims, he finds it difficult to identify himself as an important member of the team that is helping to carry out these aims.

Americans must understand, in the words of President Eisenhower: That our Nation has "grown in power and in responsibility. We have passed through the anxieties of depression and of war to a summit unmatched in man's history. Seeking to secure peace in the world, we have had to fight through the forests of the Argonne to the shores of Iwo Jima, and to the cold mountains of Korea."

That the war in Korea "is, for Americans, the most painful phase of Communist aggression throughout the world. It is clearly a part of the same calculated assault that the aggressor is simultaneously pressing in Indochina and in Malaya, and of the strategic situation that manifestly embraces the Island of Formosa and the Chinese Nationalist forces there."

That "we view our Nation's strength and security as a trust, upon which rests the hope of free men everywhere."

That "security based upon heavy armaments is a way of life that has been forced upon us and upon our Allies. We don't like it; in fact we hate it. But so long as such an unmistakable, self-confirmed threat to our freedom exists, we will carry these burdens with dedication and determination."

If you understand and agree with these national aims you know why *someone* must help defend the Nation. You know why many Americans must serve in many parts of the world today. But you still want an answer to your question: Why should I serve? You can think of a lot of other men your age who are not serving, and you wonder why the draft boards took you and your buddies instead.

I believe that if you do some really deep thinking about this, you will come up with the same answers that I have. Like the soldiers at Fort Dix, when they acted as a draft board during one of the Hours on Freedom, you will find that deciding which man to draft and which to defer is not easy, and that dozens of factors must be considered in each case.

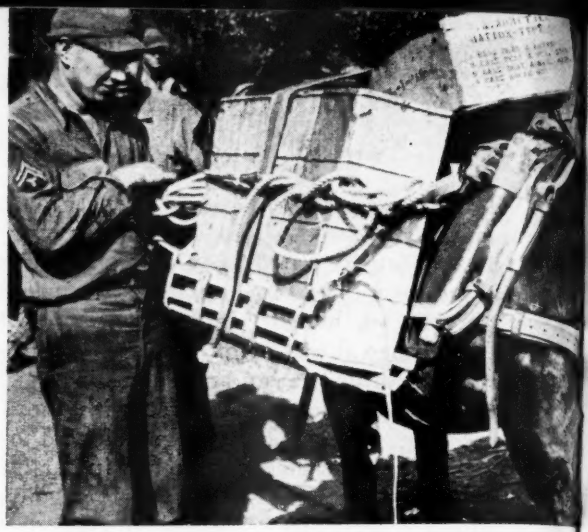
You will find that through our democratic processes—our system of government by our representatives—the fairness of the whole Selective Service system is being constantly examined and every effort is made not only to keep it fair but to perfect it.

And, perhaps most important of all, you will realize that—as much as any American, and more than most Americans—you are needed to help this Nation of ours in its most recent crisis. You are needed as much as any citizen has been since we won our independence. You are needed as much as your son or grandson may be needed to keep our Nation strong decades from now. This is your inheritance as a male citizen—along with the many rights and benefits you enjoy as an American. This is not merely someone else's obligation; it is yours.

These are some of the answers I have found to the big questions that are troubling Americans of service age. But much more important than my answers are the answers worked out by *you* and hundreds of thousands of other Americans like you. On your answers depends our Nation's continued strength.

Mountain

In rough terrain, donkeys' strong legs and backs take over the task of moving up supplies.
U. S. Army Photograph



River

Men and equipment pile up on the mudflats while waiting to cross a river.
U. S. Army Photograph

Arctic

In the extreme Arctic cold, the container may become brittle and split open if subject to rough handling.
U. S. Army Photograph

QUARTERMASTER PACKAGING DELIVERS THE GOODS

LIEUTENANT COLONEL G. F. McANENY

WHEN THE CLERK in the Post Office gives your hastily wrapped Christmas packages a skeptical look and says, "Are they wrapped well? Is there anything breakable inside?" he is touching on a problem that the Quartermaster Corps has been working on for years. Safe packaging of supplies in strong containers is one of the crucial logistical problems in war.

As the result of years of experience with containers of various sizes, shapes and materials, Quartermaster packaging specialists can readily paraphrase the famous United States Postal Service motto to read, "Neither snow, nor tropic rain, nor desert heat, nor arctic cold, nor crushing weight, nor attack by bacteria, mold, insects, rodents or gamma rays, stays the military container from the successful completion of its appointed mission."

It is in the shipping room of the factory or processing plant that the military container begins its progressive battle for survival and the protection of its contents. The battle continues in the boxcar or truck with sudden starts and jolting stops. After the package arrives at the port for oversea shipment, it is swung aboard ship in a cargo net, which is unequalled in its ability to exert an annihilating sidewise pressure. In the hold, the crushing pressure of tons of material goes to work. There also may be tropic heat or arctic cold. A vessel passing through equatorial waters may find the temperature within a non-refrigerated hold approximating that of Death Valley.

If the container has not met its fate under these conditions, it faces the grinding embrace of the cargo net again during unloading. It lands with a jarring thump on the dock, only to encounter a new series of jolts as it is thrown onto and dumped off trucks, freight cars and more trucks.

LIEUTENANT COLONEL G. F. McANENY, Quartermaster Corps, is Commandant, Quartermaster Food and Container Institute for the Armed Forces, Chicago, Illinois.

During a beachhead landing, all of these normal hazards are exaggerated by the compelling necessity for speed and more speed in piling up material on the beach. Since a freighter usually cannot approach a shoreline closer than two thousand yards, a fleet of shallow draft vessels must be used. The container is yanked up from the hold and plunked down onto the landing craft. More rough treatment follows as the landing craft lurches and wallows toward the shore. In the meantime, the container may be soaked by salt spray or rain.

Arriving ashore, the long suffering package—which may contain anything from rations and clothing to engine assemblies—is exposed to new hazards in storage. Damage may be caused by poor stacking, weather or vermin. Overstacking of supplies on beaches or in warehouses may crush the bottom containers and result in a high percentage of loss. Only alert supply officers can avert this by insisting that stacks be built up properly.

Extremely high or low temperatures, wind, snow, sleet and rain are the enemies of supplies while in storage. But protection against the weather is not enough. Insects, molds and rodents also may cause damage. Clean storage areas, dunnage, insecticides, fumigants and segregation of supplies help to reduce losses but in final analysis the main burden of resistance must be borne by the container devised by the packaging and packing experts of the Quartermaster Corps.

Research in Quartermaster packaging problems centers in the Quartermaster Food and Container Institute for the Armed Forces at Chicago, Illinois, where the Container Laboratories have been operating since February 1946. Here scientists employ laboratory methods and testing devices to simulate under speeded-up conditions all possible wear and tear experienced in the field. Their studies help determine the best methods of packaging and packing to protect food and materiel from chemical, physical and microbiological damage.

In a technical sense, the terms "packaging" and "packing" are related but are different in meaning. Packaging is commonly defined as the use of various materials for protecting and preserving the contents from contamination, while packing means the binding or holding together of small items with such materials as wood, fiberboard, metal, paper or cloth to guard against physical damage and to facilitate handling.

The problem embraces preparation for shipment of some eighty thousand items of Quartermaster supply, which are classified into four principal groups—subsistence, clothing,

Plane-borne

A canvas chute helps ease the descent of containers from a cargo plane.

U. S. Air Force Photograph

Para-borne

Gasoline in 55-gallon drums is parachuted into a drop zone by an Army Quartermaster Aerial Supply Unit.

U. S. Army Photograph

Free-fall

A soldier gathers up flexible free-fall containers dropped from aircraft.

U. S. Army Photograph

equipage and general supplies. *Subsistence* comprises all regular and special rations and ration items necessary to maintain the health and well-being of troops in battle, in theaters of operation, or in the zone of interior. *Clothing* includes items of general issue needed to dress the man properly whatever his location and situation. *Equipage* covers all the paraphernalia necessary to maintain him and his equipment in the field—tents, tarpaulins, slings and the like. Economy of weight and bulk is of great concern in this category. *General supplies* embraces a tremendous number of items and a multiplicity of categories—all necessary for the support of the serviceman under all conceivable conditions. Such items may range from office supplies to dangerous chemicals, and machinery for the repair and maintenance of equipment in combat areas.

Substances required for packaging these types of supplies are grouped in three broad categories—intermediate and interior packaging materials, protective barrier materials, and exterior materials. *Intermediate and interior packaging materials* consist of complete units of issue for distribution of supplies such as folding cartons and metal cans as well as wrapping and cushioning matter. *Protective barrier materials* are those designed to protect an item by rendering it waterproof, greaseproof or air-tight. *Exterior materials* are those used in the design of shipping containers—plywood drums, fiberboard drums, fiberboard and nailed wood shipping boxes, metal cans and multiwall paper shipping sacks, to name a few.

In attacking any specific problem, the packaging and packing engineers seek first to understand it in its operation stage, next to isolate the factors of container weakness, then to discover the basic causes of failure and, finally, to devise a solution. In some instances the solution may be found through the development of new components or new features applied to existing containers; in others, by the design of a completely new container to replace the old or to serve a special purpose.

A striking example of a container designed to fulfill a special purpose is the "flying saucer"—a new synthetic rubber unit developed under the supervision of the Research and Development Division of the Office of the Quartermaster General. This item is currently undergoing tests as a means for aerial delivery, by free fall, of gasoline, water or other liquids. To date the disc has been dropped successfully from altitudes of 100 to 2000 feet and experimental models have been used repeatedly.

The flying saucer is only one among several items recently

devised. Two other less spectacular but probably even more important developments out of the packaging bag of tricks are reusable shipping containers and demountable ones. Reusable containers have been developed for engine, transmission and power axle assemblies. They have less cubic displacement, are lighter and are considerably easier to handle during shipment and storage. Already some have withstood an average of forty trips between the fifth echelon repair shops at Jeffersonville, Indiana, and Ogden, Utah, and the field. They carry the nonfunctioning assemblies to the shops for major overhaul and then are used again to deliver the reconditioned equipment.

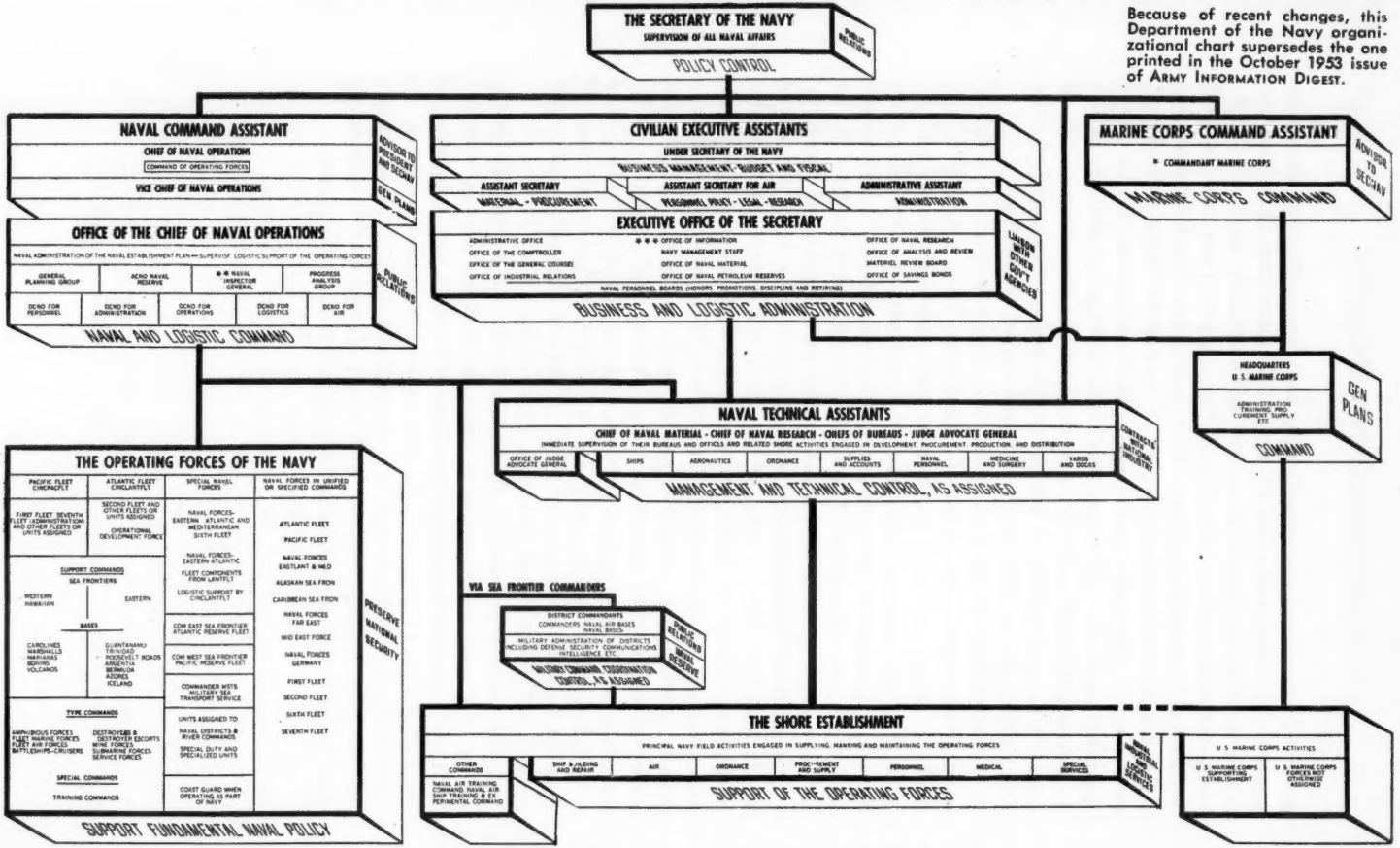
Demountable containers permit easy access to packaged equipment for necessary servicing en route and in storage. The side and top panels of these containers are simply unbolted and rebolted as necessary. Demountable containers possess the additional advantage of easy storage in a knocked-down state and, although not considered "reusable" in the strict sense of the word, can be quickly re-assembled for re-shipment of the item.

Not only are packaging problems solved by new or improved containers but also by new or improved techniques. A "circular slide rule" has been developed for rapid determination of stacking strength of fiberboard containers. This rule is used as a handy method of determining the safe stacking heights for solid or corrugated fiberboard containers, and it can also be used in designing packages to meet specified stacking load conditions. The device evaluates stacking strength in terms of type of board, perimeter of box, direction of loading, moisture content of board, and duration of storage.

Great things are ahead in the military packaging field—developments more spectacular than even the "flying saucer." Materials currently being tested may lead to the adoption of new type containers which may seem radical in design by present-day standards but which will be immeasurably more effective in coping with their primary purpose—the safe transport of military goods from assembly line to issuing line.

DEPARTMENT OF THE NAVY

Because of recent changes, this Department of the Navy organizational chart supersedes the one printed in the October 1953 issue of ARMY INFORMATION DIGEST.


THE SECRETARY OF THE NAVY
SUPERVISION OF ALL NAVAL AFFAIRS
PUBLIC RELATIONS
POLICY CONTROL
NAVAL COMMAND ASSISTANT
CHIEF OF NAVAL OPERATIONS
COMMAND OF OPERATING FORCES
VICE CHIEF OF NAVAL OPERATIONS
ADVISORS TO PRESIDENT AND SECNAV
GEN PLANS
CIVILIAN EXECUTIVE ASSISTANTS
UNDER SECRETARY OF THE NAVY
BUSINESS MANAGEMENT - BUDGET AND FISCAL
ASSISTANT SECRETARY MATERIAL - PROCUREMENT
ASSISTANT SECRETARY FOR AIR PERSONNEL POLICY - LEGAL - RESEARCH
ADMINISTRATIVE ASSISTANT ADMINISTRATION
MARINE CORPS COMMAND ASSISTANT
* COMMANDANT MARINE CORPS
ADVISOR TO SECNAV
MARINE CORPS COMMAND
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
NAVAL ADMINISTRATION OF THE NAVAL ESTABLISHMENT PLANS — SUPERVISE LOGISTIC SUPPORT OF THE OPERATING FORCES
GENERAL PLANNING GROUP
ACNO NAVAL RESERVE
** NAVAL INSPECTOR GENERAL
PROGRESS ANALYSIS GROUP
DCNO FOR PERSONNEL
DCNO FOR ADMINISTRATION
DCNO FOR OPERATIONS
DCNO FOR LOGISTICS
DCNO FOR AIR
PUBLIC RELATIONS
NAVAL AND LOGISTIC COMMAND
EXECUTIVE OFFICE OF THE SECRETARY
ADMINISTRATIVE OFFICE
OFFICE OF THE COMPTROLLER
OFFICE OF THE GENERAL COUNSEL
OFFICE OF INDUSTRIAL RELATIONS
*** OFFICE OF INFORMATION
NAVY MANAGEMENT STAFF
OFFICE OF NAVAL MATERIAL
OFFICE OF NAVAL PETROLEUM RESERVES
OFFICE OF NAVAL RESEARCH
OFFICE OF ANALYSIS AND REVIEW
MATERIEL REVIEW BOARD
OFFICE OF SAVINGS BONDS
NAVAL PERSONNEL BOARDS (HONORS, PROMOTIONS, DISCIPLINE AND RETIRING)
LIAISON WITH OTHER GOVT AGENCIES
BUSINESS AND LOGISTIC ADMINISTRATION
HEADQUARTERS U.S. MARINE CORPS
ADMINISTRATION TRAINING PROCUREMENT SUPPLY ETC
GEN PLANS
COMMAND
NAVAL TECHNICAL ASSISTANTS
CHIEF OF NAVAL MATERIAL - CHIEF OF NAVAL RESEARCH - CHIEFS OF BUREAUS - JUDGE ADVOCATE GENERAL
IMMEDIATE SUPERVISION OF THEIR BUREAUS AND OFFICES AND RELATED SHORE ACTIVITIES ENGAGED IN DEVELOPMENT, PROCUREMENT, PRODUCTION, AND DISTRIBUTION
OFFICE OF JUDGE ADVOCATE GENERAL
SHIPS
AERONAUTICS
ORDNANCE
SUPPLIES AND ACCOUNTS
NAVAL PERSONNEL
MEDICINE AND SURGERY
YARDS AND DOCKS
CONTRACTS WITH INDUSTRY
MANAGEMENT AND TECHNICAL CONTROL, AS ASSIGNED
THE OPERATING FORCES OF THE NAVY
PACIFIC FLEET CINCPACFLT
ATLANTIC FLEET CINCLANTFLT
FIRST FLEET SEVENTH FLEET (ADMINISTRATION) AND OTHER FLEETS OR UNITS ASSIGNED
SECOND FLEET AND OTHER FLEETS OR UNITS ASSIGNED
OPERATIONAL DEVELOPMENT FORCE
SUPPORT COMMANDS
SEA FRONTIERS
WESTERN HAWAIIAN
EASTERN
BASES
CAROLINES MARSHALLS MARIANAS BONINS VOLCANOS
GUANTANAMO TRINIDAD ROOSEVELT ROADS ARGENTIA BERMUDA AZORES ICELAND
TYPE COMMANDS
AMPHIBIOUS FORCES FLEET MARINE FORCES FLEET AIR FORCES BATTLESHIPS-CRUISERS
DESTROYERS & DESTROYER ESCORTS MINE FORCES SUBMARINE FORCES SERVICE FORCES
SPECIAL COMMANDS
TRAINING COMMANDS
SPECIAL NAVAL FORCES
NAVAL FORCES-EASTERN ATLANTIC AND MEDITERRANEAN SIXTH FLEET
NAVAL FORCES-EASTERN ATLANTIC
FLEET COMPONENTS FROM LANTFLT
LOGISTIC SUPPORT BY CINCLANTFLT
COM EAST SEA FRONTIER ATLANTIC RESERVE FLEET
COM WEST SEA FRONTIER PACIFIC RESERVE FLEET
COMMANDER MSTS MILITARY SEA TRANSPORT SERVICE
UNITS ASSIGNED TO NAVAL DISTRICTS & RIVER COMMANDS
SPECIAL DUTY AND SPECIALIZED UNITS
COAST GUARD WHEN OPERATING AS PART OF NAVY
NAVAL FORCES IN UNIFIED OR SPECIFIED COMMANDS
ATLANTIC FLEET
PACIFIC FLEET
NAVAL FORCES EASTLANT & MED
ALASKAN SEA FRON
CARIBBEAN SEA FRON
NAVAL FORCES FAR EAST
MID EAST FORCE
NAVAL FORCES GERMANY
FIRST FLEET
SECOND FLEET
SIXTH FLEET
SEVENTH FLEET
PRESERVE NATIONAL SECURITY
SUPPORT FUNDAMENTAL NAVAL POLICY
VIA SEA FRONTIER COMMANDERS
DISTRICT COMMANDANTS COMMANDERS NAVAL AIR BASES NAVAL BASES
MILITARY ADMINISTRATION OF DISTRICTS INCLUDING DEFENSE SECURITY COMMUNICATIONS INTELLIGENCE ETC
PUBLIC RELATIONS
NAVAL RESERVE
MILITARY COMMAND COORDINATION CONTROL AS ASSIGNED
THE SHORE ESTABLISHMENT
PRINCIPAL NAVY FIELD ACTIVITIES ENGAGED IN SUPPLYING, MANNING AND MAINTAINING THE OPERATING FORCES
OTHER COMMANDS
NAVAL AIR TRAINING COMMAND, NAVAL AIR SHIP TRAINING & EX PERIMENTAL COMMAND
SHIP BUILDING AND REPAIR
AIR
ORDNANCE
PROCUREMENT AND SUPPLY
PERSONNEL
MEDICAL
SPECIAL SERVICES
NAVAL INDUSTRIAL RESERVE LOGISTICS SERVICES
SUPPORT OF THE OPERATING FORCES
U.S. MARINE CORPS ACTIVITIES
U.S. MARINE CORPS SUPPORTING ESTABLISHMENT
U.S. MARINE CORPS FORCES NOT OTHERWISE ASSIGNED

* RESPONSIBLE TO CNO WHEN CNO IS ACTING IN HIS CAPACITY AS NAVAL EXECUTIVE TO SECNAV
** COLLATERAL RESPONSIBILITIES TO SECNAV
*** DUAL RESPONSIBILITIES TO SECNAV AND CNO

1 AUGUST 1953

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FLIGHT TESTING IS THEIR BUSINESS

AIRMAN FIRST CLASS S. R. BYRON

RESIDENTS of Southern California who saw a giant airplane executing strange maneuvers one day recently probably thought the pilot was crazy. He climbed and dived, banked and turned, and went through several wing-shuddering stalls—all within a few short hours.

To the casual observer, it doubtless seemed as if the pilot were merely "playing around" in the sky with a multi-million dollar machine. What the citizens of Southern California did not and could not know, however, was that every move had been planned for many months and was being executed by a smooth-functioning team of engineers and pilots.

The plane was a long-range, four engine transport. Its home base, the Air Force Flight Test Center at Edwards Air Force Base, is west of the Sierra Madre Mountains in California's Mojave Desert. The model was undergoing the fourth phase of its flight tests for the Air Research and Development Command, prior to final acceptance.

Flight testing by the Air Force is divided into seven separate phases—some performed by the manufacturer and some by the Air Force. (See chart, page 36.) Depending upon complexity and size, elapsed time of all tests may take anywhere from a few months to several years.

During the first phase, the manufacturer must prove to the Air Force that his new model is airworthy, that it will function and that it and its equipment meet engineering specifications. Normally the manufacturer does his Phase I testing at the company's plant, though some of this work has been done at Edwards AFB, especially with high-speed types that require extensive landing or take-off space.

The natural setting of the Flight Test Center is used to best

AIRMAN FIRST CLASS S. R. BYRON, USAF, is on duty with the Public Information Office, Air Force Flight Test Center, Edwards Air Force Base, California.

advantage. The 65 square miles of Rogers Dry Lake can be utilized more than eight months of each year and the lake surface, composed of fine silt and clay, supports pressures up to 250 pounds per square inch. Acting as a drainage basin for a large portion of the Mojave Desert, the lake automatically resurfaces itself yearly by the action of the winter rains. Several runways five miles long and one eight miles long—the world's largest—are available for high-speed landings and extended take-offs.

Although Air Force pilots may on occasion fly a new prototype several times during Phase I, it is during Phase II that the Air Force actually takes over the plane from the contractor and begins limited performance and stability tests. Object of the Phase II tests is to determine the performance and handling characteristics of the new model. The tests also reveal whether the manufacturer has met the design characteristics that he guaranteed.

Only one airplane is required for Phase II tests. During and after the trials, Air Force pilots and engineers make recommendations for changes—from making the seat more comfortable to changing the shape or size of the plane to render it more suitable for its designed mission. If, at the end of Phase I and II tests, the Air Force decides not to buy the experimental plane, testing on the project is usually stopped.

If it does pass both series, the model goes back to the manfacturer for Phase III. This step is one that never ceases as long as the machine is in production. During this stage the contractor irons out any deficiencies which previous tests have revealed and makes any improvements that he thinks will better the performance. Often a contractor will evolve almost a completely new plane. Some aircraft have run through as many as nine model designations with the final model sometimes bearing little resemblance to the original product.

Complete and comprehensive testing by the Air Force begins with the Phase IV tests, all of which are conducted at the Flight Test Center. A test requirement is prepared by the project office at the Wright Air Development Center, Wright-Pattterson Air Force Base, Ohio, and a Flight Test Center engineer is assigned to carry it out. He draws up a detailed program, listing the various weights and external configurations in which the plane will be tested, the number of test hours the program will take, the amount and type of data required and the different maneuvers to be executed. The engineer then decides what test instruments should be fitted into the aircraft, and he supervises their installation. Phase IV tests usually take upwards of 80

The same project engineer and test pilot are assigned to an aircraft throughout an entire phase of testing. U. S. Air Force Photograph

flying hours to complete. The required time is proportionately longer on a more complicated aircraft.

Phase V consists of all-weather tests for airworthiness, with trial runs conducted at the Wright Air Development Center.

During Phase VI, anywhere from two to ten planes of a particular model are assigned to the Flight Test Center for "functional development testing." At this stage, representatives from major Air Force Commands which will be using the new model come to the Center to fly and become familiar with it and its particular maintenance problems. The aircraft are flown as much as 200 hours in as short a period as possible, under all kinds of conditions. Such hard and fast usage gives engineers, maintenance men and manufacturers data on the expected service life of various parts. It also provides a "yardstick" for determining stock levels for spare parts.

Final testing of a newly developed plane is accomplished at the Air Proving Ground Command at Eglin Air Force Base, Florida, where the plane is again tried out under all sorts of conditions but this time as a tactical fighting unit.

Flight testing of new aircraft is a far cry from the era when daredevil pilots took a plane into a power-dive "to see if the wings come off." Testing now is a highly complex, precise opera-

tion, involving meticulous attention to detail and the measurement of voluminous data as accurately as possible.

A typical flight begins with the need for specific data on an aircraft's performance. After the plane has been fitted with a multitude of test instruments by the Center's Instrumentation Laboratory, the project engineer determines what data shall be obtained on the flight and briefs the pilot on what is required. The same pilot and engineer, incidentally, are assigned to a plane throughout an entire phase.

A take-off time is scheduled; instrument cameras are loaded; various sections of the Flight Test and Development Directorate are informed of the flight. If the model is a multi-place type, the flight engineer goes along. If it is a single seat fighter, he communicates with the pilot at all times on one of six special radio channels assigned for this purpose.

Every moment of a test flight is made to count. From the time the plane starts down the runway until its engines are cut after landing, useful data are being obtained. The flight starts with a "performance" or short field take-off, where the pilot tries to determine the shortest distance necessary to get safely airborne. Such take-offs are recorded by an ingenious instrument known

Phases of Flight Testing

Phase:	*Tested For:*	*Performed by:*
I	Airworthiness. Compliance with engineering specifications.	Manufacturer.
II	Performance. Stability. Compliance with design characteristics.	Air Force Flight Test Center, Edwards Air Force Base, California.
III	Improvements and modifications as required.	Manufacturer.
IV	Complete and comprehensive airworthiness and performance.	Air Force Flight Test Center, Edwards Air Force Base, California.
V	All-weather stability and performance.	Wright Air Development Center, Wright Patterson Air Force Base, Ohio.
VI	Durability. Maintenance requirements, including service life of component parts.	Air Force Flight Test Center, Edwards Air Force Base, California.
VII	Performance as a tactical fighting unit.	Air Proving Ground Command, Eglin Air Force Base, Florida.

as a Photogrid—a camera which takes motion pictures of landings and take-offs through a calibrated wire screen. By reading the developed film, the engineer can establish how many feet are needed to get off the ground, how many feet are needed to clear a 50-foot obstacle, and the take-off angle.

After the plane is airborne, the engineer-pilot team functions constantly. If the engineer is aboard, he starts his instruments and begins recording data, while the pilot is executing a series of complicated, pre-planned maneuvers. If the test aircraft is a single seat model, the pilot transmits his observations to the engineer by radio.

At the same time, banks of instruments in the plane are being photographed by motion picture cameras to give a complete record of the flight, for later evaluation by the project engineer. In larger aircraft where the engineer can also watch the panel, a written record of instrument readings is kept to permit as many as twelve flight assessments of critical data. Thermocouples and pickups throughout the plane transmit records of pressures, temperatures and other data. Even the pilot's controls are fitted with gauges to measure the force he applies while maneuvering.

As many tests as possible are run during one flight. In some transports, flights can be as long as eight or ten hours and many different tests can be run. In fighter aircraft with limited range and fuel capacity, however, only one test or part of a test can be carried out during a flight.

Most tests are conducted over the Mojave Desert and adjoining wasteland areas northeast of Los Angeles, though some are made over the Pacific. Flights usually are conducted during early morning hours to take advantage of lower temperatures and reduced air turbulence at that time.

Typical of the many different types of tests conducted on a new aircraft are "saw-tooth" climbs. These are actually a series of ascents between pre-determined altitudes to discover the most efficient and practical climbing speed. As many as ten such climbs may be made at different speeds to find the most effective one. During actual climbs, the instrument panel is continuously photographed and such data as rate of climb, speed, fuel consumption, cylinder-head temperature and the like are recorded.

After the plane returns, the film is developed and sent to the Center's Flight Test Engineering Laboratory. Technicians read the film frame by frame and record the data on special forms. The raw figures are then fed into a battery of automatic calcu-

lators which convert them into workable form for the engineers.

The engineer and the pilot assigned to the model collaborate on a report of each phase, giving the detailed results of their tests. This information is incorporated into the recommended changes or, in the case of Phase IV tests, is included in the *Pilot's Handbook of Operating Instructions.*

Supporting the flight testing activities, a number of unusual facilities are operated at the Center. One of these is the world's fastest and straightest railroad. Rocket-propelled sleds carrying test vehicles and instruments go down the 10,000 foot track at speeds which often exceed 1000 miles per hour. This enables engineers and resident contractors to test airfoils, ejection seats, tail cone parachutes and other components at controlled speeds above Mach 1—the speed of sound. Sleds on the track are stopped by an ingenious water-brake system which brings the conveyance to a halt in 1800 feet.

Testing of the human component is accomplished on still another track. The Deceleration Track is a 2000-foot standard gauge railroad track on which skid-mounted sleds are propelled by rockets. A system of hydraulic-pneumatic brakes clasps the sled's keel on the underside and brings it to a stop. By varying the pressure on the keel, gravitational forces can be simulated to test aircraft seats, safety belts and the like. Also by this means the high deceleration which fliers experience in aircraft crashes can be studied. A force of 45.8 negative "Gs" during an experimental run on the track is the highest ever recorded by man —G denoting normal gravitational pull at sea level.

Another facility, the Experimental Rocket Test Station, includes two thrust stands which are used for the testing of rocket motors for aircraft, for auxiliary power and for guided missiles.

To provide the all-important human skills for flight testing, the Air Force conducts the Experimental Flight Test Pilot School at the Center. The School is the only one of its type in the United States Air Force and one of five in the world, the other four being operated by the United States Navy, England, France and the Soviet Union.

Here every beginning student is already a skilled pilot. Applicants in the grade of second lieutenant to major normally must have a minimum of 1500 hours diversified flying experience and educational attainments equivalent to two years of college engineering. Four courses are conducted each year, one beginning each calendar quarter and continuing for six months. About 15 pilots are trained in each class. Formal classroom work

A test pilot trainee checks his notes after completing a flight in an F-86 jet.
U. S. Air Force Photograph

"Elmer," a dummy simulating a 180-pound, six-foot man, is used to test air crash stresses on the Deceleration Track.
U. S. Air Force Photograph

in physics, mathematics, aerodynamics and thermodynamics is balanced by actual test-flight training. Under supervision of an instructor, student pilots perform long flights at extremely high altitudes, steep-rate-of-climb take-offs, nose-up landings, vertical stalls, spins, performance take-offs and minimum distance landings. The pilot, upon graduation, is prepared to test every aircraft type from helicopters and liaison planes to heavy jet bombers. A number of graduates continue on duty at the Center, while others are assigned to various installations of the Air Research and Development Command.

With the combination of the world's finest test pilots, the world's largest natural landing field, and development and testing facilities unsurpassed in the free world, the Air Force Flight Test Center is a vital activity assuring that the United States will continue to have the finest Air Force in the world.

Not a single item of our shiny new machinery of defense is worth two cents without sufficiently trained and experienced men to make it go at the instant we need it. As always, throughout human history, behind every product of man's genius stand the individual men who will either use it or fail to use it successfully.

Machines are only an extension of man's powers and those powers must be just as highly developed as the machines. The next time you see or hear a new model jet sweep across the sky, think also of the newly trained man in it and the specially trained man behind it. The man must be the master of the machine. Everything depends on him.

General Nathan F. Twining
Chief of Staff, United States Air Force

THE PAST GUIDES THE FUTURE

MAJOR FELIX KAMPSCHROER

EVER SINCE Caesar set down his *Commentaries* on the Gallic wars, the writing of military history has deeply influenced operations. Upon it has come to be based strategic concepts and tactical doctrine as adopted by all armies.

Today especially the study of military history is of prime importance to the well rounded leader and to the younger officer who expects to advance professionally. Yet despite the fact that American military accomplishments have contributed much of value to the professional student, American military history as such has been greatly neglected. Much of what was written concerning past campaigns and battle actions was prepared by participants who relied more on memory than on proper documentation, or who sought to glorify or excuse their own actions. The preservation of source documentation was neglected, so that later writers frequently had difficulty performing basically sound work.

Recognizing that sound military history is of vital importance to the profession of arms, the United States Army now is engaged in turning out a ninety-odd volume series, *The United States Army in World War II.* The nineteenth of this series, *The Fall of the Philippines* by Louis Morton, is the latest to roll from the presses of the Government Printing Office.

By now the first volumes of this series have seen wide and varied use and the function of the entire project is generally well known and understood. (See "History Through a Thousand Eyes," June 1947 DIGEST.) What is not so well known or so widely understood is the meticulous effort by Department of the Army to insure the integrity of these historical works—to make sure that each volume is accurate, balanced and objective.

To attain these results in any history is of course very difficult.

MAJOR FELIX KAMPSCHROER, Adjutant General's Corps, was formerly Chief, Order of Battle Branch, War Histories Division, Office of the Chief of Military History, Department of the Army.

To attempt it within the lifetime of most of the actors in the great drama that was World War II is a notable accomplishment.

Today the Office of Chief of Military History, a Special Staff section of Department of the Army, is charged with the responsibility of producing sound military history. This is part of its mission of initiating and directing Army historical activities in order to provide "background and precedent in the development of military plans, doctrine and technique, and historical material for use in the United States Army." Chief of Military History is Major General Albert C. Smith; his principal technical adviser is Dr. Kent Roberts Greenfield, Chief Historian.

In this office centers the work of preparing the many volumes recording the Army's activities in World War II. When completed, these will provide a monumental record of all aspects of that war. The purpose of each volume is to provide military students and planners with knowledge of the past from which lessons for the future may be drawn, as well as to enable the thoughtful citizen to appraise the performance of the Nation's Armed Forces. Thus the reader may obtain a better understanding of the arts and science of warfare which will result in more efficient operations and ultimate savings of lives and money.

But this purpose can be served only by history that is accurate, unbiased and balanced. The writer must read, digest and analyze great masses of material, and must bring into proper co-ordination and focus a variety of viewpoints. An important aid in achieving this objective is the review procedure developed by the Office of the Chief of Military History.

The Army's effort to produce history of highest quality begins with selection of the authors. They are chosen on the basis of their historical training, military knowledge and writing experience. It is admittedly rare that all three qualities are to be found in one author—but those who lacked historical training initially have gained it "on the job" while those who lacked military experience have acquired a knowledge of it from their training, associations and studies in the Army's historical office.

Source material for the authors consists of literally carloads of documents, ranging from papers and minutes of the Combined and Joint Chiefs of Staff, records of Department of the Army (formerly War Department) General and Special Staffs, papers and notes of general officers and others, diaries, unit records and captured enemy documents. Much of the material is available today because of a far-sighted policy of establishing historical units and teams early in World War II. Historical offices were

set up throughout the top echelons of combat branches and in headquarters of technical and administrative services. The small staffs usually were able to call upon hundreds of officers and enlisted men to assist part time as lower unit historians.

Early in the war, historical officers in Washington and in the field obtained access to all classified material as well as permission to attend staff conferences when future action was being planned. In this way a small group of historians was able to plan its activities to cover coming events to the best advantage. Soldier-historians were on all fronts, often collecting information during actual operations. As a result, students can draw on a profusion of source material such as has seldom been available to the historians of war.

No restriction is placed on the data made available to the author, with only such obviously necessary exceptions as the personal (201 file) records of officers still on active duty. In the preparation of the recently published *Stilwell's Mission to China*, as an example, the authors consulted the papers and minutes of the Combined and the Joint Chiefs of Staff, records of the War Department staffs, documents originating in the China-Burma-India Theater; Japanese records and postwar studies, and in addition, General Stilwell's personal notes and diaries, both those in Army custody and those opened to the Army's historians by Mrs. Stilwell. Army records, it should be pointed out, are available to any recognized scholar who has security clearance.

In the effort to achieve accuracy and full objectivity, each volume is subjected to a professional scrutiny and review which is probably more thorough than ever has been provided for any similar history.

First step in the review procedure is a careful study of the author's outline of his proposed book by competent critics in the Office of the Chief of Military History and outside. The purpose of this review is not to fix the organization of the volume—which in final form generally differs greatly from the original outline—but to insure complete and balanced coverage.

Next the author gets down to the task of writing. When he has roughed out one or two chapters, they are reviewed in a graduate seminar type of discussion conducted by the Chief Historian. These seminars give the author not only a check on his progress but also an opportunity to profit by the accumulated knowledge and experience of his colleagues. At the same time, personnel in the Office of the Chief of Military History become more completely acquainted with the methods, capabilities and

limitations of the author. In the course of his writing the author himself often passes along successive chapters for comment by colleagues in related fields.

Finally the author completes the first draft of his book. In most instances his work would be largely finished now; about all that would remain would be polishing or rewriting some parts. But in preparing Army history, an important part of the review procedure comes after the author has submitted his manuscript, when he has said in effect, "This is the best I can do." Copies of the manuscript are reproduced and sent to the principal participants mentioned in the book. Other copies go to a carefully selected panel of historians, officers and technical experts.

Comments of the participants often are surprising in their objectivity, authors have found. Furthermore, in their natural desire to explain their roles in the battles, commanders frequently have brought to light reasons for decisions which were not revealed in the official record. Their comments of course vary widely in value, since they depend on memory, the individual's own military and historical interests, his role in the operation or activity, and his objectivity.

While participants are reading the manuscript and preparing their comments, the review panel is at work. Its criticisms help the Chief Historian to determine what may be necessary to perfect the manuscript. They also enable the author to anticipate legitimate criticism which his work might later receive from readers, reviewers and future historians.

The panel discussion does more thoroughly for the entire manuscript what the first seminar did for one single chapter. To insure complete freedom of discussion the author is not invited to the meetings, as he was in the first review of a chapter. Panel members discuss, both orally and in writing, the merits of the manuscript; whether its style and organization are effective; its accuracy in the light of evidence used by the author; and whether other material, apparently not examined, might affect the conclusions.

A variety of questions are considered in the critiques. Are the conclusions justified by the evidence presented? Are important phases of the activities described given due prominence and are less important though sometimes more sensational phases properly subordinated? Is the documentation accurate and does it give the studious reader information as to sources used?

From the comments of participants and panel members, a master critique is prepared by the Chief Historian. This is then

used as a guide by the author in revising his manuscript. When the revision meets the requirements of the master critique, it is accepted by the Chief of Military History for publication. Although each volume is part of the "official" history of the United States Army, it is published as the work of an author, who assumes responsibility for the contents of the printed book.

The accuracy of the forthcoming volume is still further enhanced by a careful pre-publication processing. Detailed studies are made of maps; experts of the Army Comptroller's Office verify any statistics used; a thorough editorial process provides a painstaking check on grammar, punctuation, style, spelling of names, places and units and an over-all critical analysis of the literary presentation.

Meanwhile, the manuscript has received a security review. This has nothing to do with the quality of the printed book, but is applied to insure that no material is published to the detriment of national security. For instance, messages transmitted in certain codes used during the war still may not be quoted verbatim but must be paraphrased. The preliminary reviews and checks given to the book are not mandatory but are simply taken to insure complete accuracy, objectivity and literary quality; the security review does not concern itself with the literary or other phases.

It doubtless would be astonishing to writers of Civil War times, or even to modern writers who picture officialdom as endeavoring to protect itself, that nothing is suppressed in these histories simply because it may reflect unfavorably on an individual, a group or the Army. At the same time derogatory material is not allowed to remain in a book merely because it might attract readers. As an example, an incident described in *The Lorraine Campaign* portrays a corps commander—who is named—as having made a serious error in judgment. Over the objections of the officer himself, the passage was left in the book because it was felt that only in the light of his decision could the operation be understood. But in the same volume a reference to an episode embarrassing to a high-ranking officer's family was deleted because the incident had occurred at a time and place other than that covered by the narrative.

Assisting the Chief of Military History still further in his effort to produce a historical series of over-all excellence is the Advisory Committee whose membership, appointed by the Secretary of the Army, is drawn from the foremost historical scholars of the Nation and from high ranking officers of the Army's educational system. While this committee as such does

not review each volume before publication, its influence is manifest in the maintenance of high standards of scholarship for all books of the series.

This entire review procedure—outline analysis, seminar discussions, critical readings of individual chapters, review by participants and panel members, and final editorial processing—is designed to produce a better book than could be written without such assistance.

The authors themselves are convinced that this review procedure accomplishes its purpose. They and the Chief of Military History know that the book will never receive as critical a reading after publication as it received before being printed. Authors thus have the assurance that no flagrant blunders have been made and readers may be certain that the finished product is a contribution to the best traditions of military historiography.

There is no more solemn trust than the command of American soldiers... A commander's authority cannot be separated from his responsibility. For the military commander, there is no clock signalling the end of the day. The commander's authority and responsibility extend around the clock, applying not only to the soldier's military duties but to everything affecting his fitness and readiness to perform those duties. This authority imposes equally high responsibility for its proper exercise. Everything a commander does in his official capacity may be related to a future moment of crisis when his decision, and his men's readiness to act on it, will provide the final test of his ability to command, and the success or failure of his mission.

The Honorable Robert T. Stevens
Secretary of the Army

EDUCATION CONTRIBUTES TO NATIONAL SECURITY

GLENN L. McCONAGHA
AND
HELEN F. HAUGE

THE BOOKMOBILE that once lumbered over rough mountain trails in the area directly behind the front lines in Korea may no longer be in danger of stray shell fire but today it is in some danger of breaking down under the added load imposed on its services. More soldiers in Korea are using the facilities offered by this truck piled high with books—United States Armed Forces Institute (USAFI) courses on hundreds of subjects ranging from reading and arithmetic to farming and television.

While the mobile unit is perhaps the most dramatic manifestation of the way in which USAFI services are being brought to Armed Forces personnel everywhere, it is only typical of the work being carried on all over the world, on land and sea—work which has been going on for more than ten years and which is continually being geared to changing world conditions.

Today the entire planning for USAFI must be built around the apparent fact that for some years to come large numbers of new personnel will be called to serve in one or another of the services. This means that basically our forces will be composed of career personnel making the service their life work, and of selectees who will serve for two or three years. To fill the educational needs of both types requires a program of the most comprehensive kind—the career men require courses that will advance them in their fields while the selectees must be provided with opportunity to study for growth and future learning when they leave the service.

In this second field special difficulties are encountered. Only too often the selectee may look upon his period of service as an interruption which produces a feeling of uncertainty about his future. It is therefore imperative that a positive attitude be

DR. GLENN L. McCONOGHA was formerly Director of United States Armed Forces Institute; HELEN F. HAUGE is Assistant to the Director.

Stocks of USAFI text books stored in Japan will be distributed to servicemen in the Far East. U. S. Army Photograph

substituted for any possible negative feelings or fears. The individual must be given both the incentive and the opportunity to better himself.

But the total problem is one that goes far beyond the scope and responsibility of the military establishment. For these young people it is essentially a problem of readiness for service, in mind and in spirit, and one which involves guidance and counseling before they go into the service. It is the problem of civilian communities, parents, schools and churches alike.

Recognizing this double need, the Department of Defense is working with the North Central Association of Colleges and Secondary Schools for the development of a guidance organization for students still in school who expect to enter military service. This unit will acquaint pre-service youth with the opportunities for continued educational advancement while in the Armed Forces. As for the broader aspects, the Committee on the Armed Forces Education Program—military and civilian advisers to the Secretary of Defense—in April 1953 recommended that a national committee be established to study the problem of integration of military service into the life plans of American youth. Representatives of elementary, secondary and higher education, national organizations, governmental agencies and appropriate lay groups will take part.

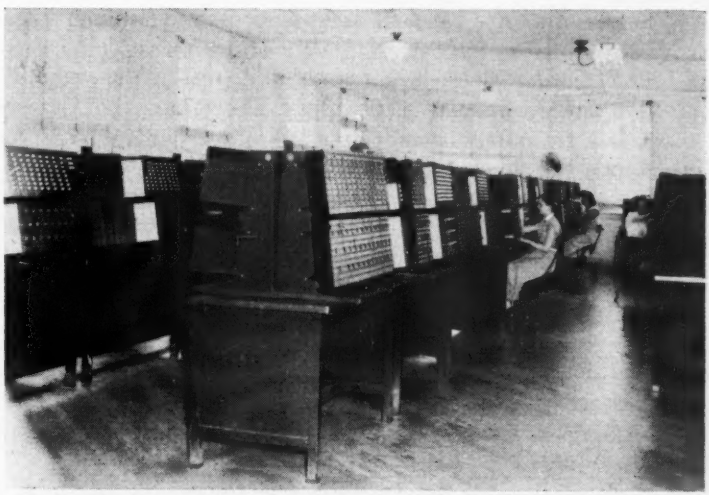
In military terms, all of this may be described as grand strategy—a bold, broad plan of attack on the over-all objective

of producing an informed, well-integrated individual who will be a better serviceman or woman and a better all-around citizen. As for meeting the immediate problem tactically, every effort is being made to assure available educational facilities that will make service as profitable as possible to the individual.

To fill this present need calls for stabilizing the educational program of the Armed Forces. Here again every scientific educational approach is being utilized. For instance, beginning in 1951 under the sponsorship of the American Council on Education, an evaluation of the entire Institute was carried out. That study was made to insure that educational materials utilized by USAFI are representative of the best standards prevailing in civilian correspondence programs.

With a favorable report on that study as a basis, valuable information for continued improvement of USAFI educational materials was obtained. Today further stabilization of the program is expected from a current study being made under direction of experts from the University of Chicago. This study is concentrating on the soundness of the USAFI testing materials and procedures. As a result, advances may be made in the techniques and practices of testing.

In the United States, arrangements have been made by the military services for civilian schools and colleges located near military installations to offer evening courses to service per-



Names of every individual who has ever enrolled in a USAFI course are filed at USAFI Headquarters. U. S. Army Photograph

sonnel. Similarly, with the participation of six American colleges and universities—the University of California, University of Maryland, Louisiana State University, American International College, University of Alaska, and University of Hawaii—the Armed Forces have extended the college campus to distant parts of the world. These classes, offered during off-duty hours and taught by faculty members of the colleges and universities, are not a responsibility of USAFI but are conducted by the military departments as a part of their education programs.

With the cessation of hostilities, the mobile units and numerous other USAFI outlets all over the globe, are being utilized to the straining point. What are some of the reasons for this continuing demand? What impels servicemen and women to seek to advance their education? Many reveal their motives in the hundreds of letters being received daily at USAFI headquarters in Madison, Wisconsin.

There is the Navy man, for instance, who was interested in professional scouting and wanted to start studying immediately to complete the required two years of college. Another wrote: "I was a Reservist and was called back the first part of this year. My intention of going to carpentry school was all fouled up until I heard of USAFI. Now all my spare time is being used up in a useful manner—it helps morale quite a bit." Still other men and women study USAFI courses to get ahead while in the service.

As their comments suggest, service men and women represent a wide range in education, ability and interest. This means that USAFI cannot determine course offerings in the same way as do civilian educational institutions. There must be a variety of materials to satisfy the desires of all. Accordingly USAFI offers courses at the basic and intermediate levels (grades one through eight), at the secondary level (grades nine through twelve), at the college level, and in technical and vocational fields. Throughout, there must be a concern with increasing military efficiency, yet at the same time the course of study must parallel that of civilian education.

As in any program, success can be measured only in terms of effectiveness. One gauge is participation. Men and women in uniform are currently studying some 275,000 courses under USAFI auspices. The general aim, however, must be toward even greater participation by a larger number of people.

A second method of determining effectiveness is the number who complete their courses and benefit thereby. Three factors

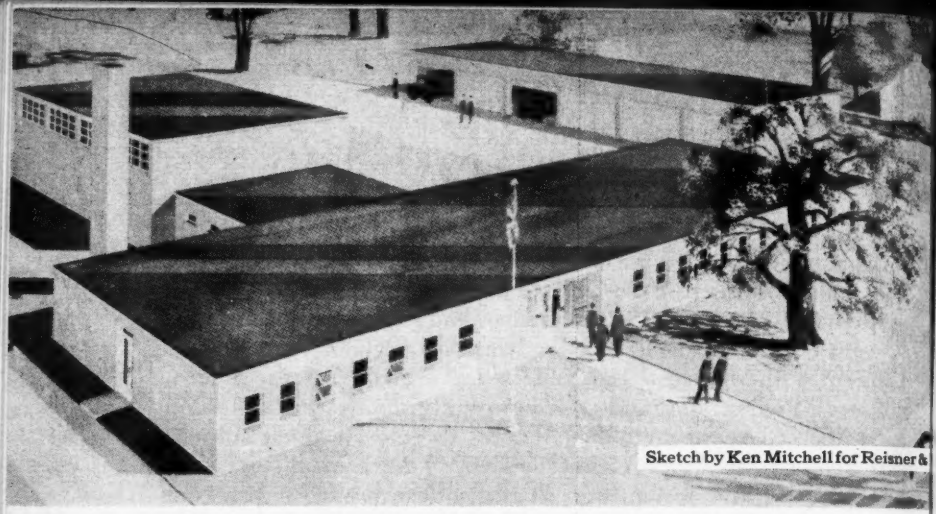
help insure a high percentage of course completions. Individuals must not be enrolled in courses beyond their education level; the materials furnished the student must be superior; and the student must be guided in his choices and in his study.

Another measurement of effectiveness is popularity of courses. Currently the greatest demand is for USAFI correspondence courses which schools and colleges usually require for a diploma or a degree. At the high school level the most wanted subjects are algebra, arithmetic, mathematics, American history, and bookkeeping and accounting. At the college level, English composition, algebra, accounting, psychology and business law show the highest levels of participation. In the technical-vocational area many of the most popular courses have a direct relationship to military assignment—*The Automobile Engine, Radio for Beginners, Auto Mechanics, Television* and *Elementary Electricity*.

Effectiveness of the program is also determined by the recognition accorded by schools and colleges to work completed by service personnel. In USAFI files are thousands of letters from present and former students telling of credits they have obtained for their USAFI courses. One such letter is from a Navy veteran: "Through USAFI I was able to complete high school and obtain almost a full year of college credits." An Air Force officer reported: "The University of Dayton awarded me a bachelor of science degree with a major in physics, and . . . gave me credit for 52 semester hours of extension work from USAFI." These two cases are typical of the academic success attained by over a million servicemen and women.

Finally, effectiveness of the military education program is measured in terms of its contribution to command. Besides helping the individual serviceman acquire greater efficiency in performing his military assignment, such studies increase his capabilities and prepare him to assume greater responsibility.

Education which raises the individual level of achievement ultimately means greater safety for the Nation. Not only will it create wider understanding by our youth of the reasons why they are in uniform and what they can gain individually while in service, but also it will mean more profitable use of leisure time by servicemen and women. The gain will be evident in improved citizenship and greater national security.



TRAINING CENTERS FOR THE ARMY RESERVE

LIEUTENANT COLONEL L. F. SPRINGER

ARMY RESERVE training units currently striving to reach prescribed maintenance levels in both officer and enlisted strength at times find it difficult to attract personnel because of a lack of adequate training facilities. A 1948 survey revealed that many units were using leased space in commercial buildings or donated space in meeting halls or clubs—settings entirely inadequate for systematic training. Heavy equipment often could not be properly stored or used. Floors in some commercial buildings would not hold the weight of an artillery gun or a tank. And often, because the space was donated, the training schedule had to be interrupted to make way for social and recreational functions sponsored by the donors.

As a result of this survey, an intensive program was launched to provide the active Army Reserve with the space needed for training. Already, with funds appropriated in 1950, thirty-eight armory-type buildings known as Army Reserve Training Centers have been constructed and six others have been purchased across the Nation. Each building is designed to serve several units of 200 men each, and provides office space for the units, a drill hall, small bore rifle range, lockers, storage facili-

LIEUTENANT COLONEL L. F. SPRINGER, Infantry, was formerly Chief of the Facilities Branch and is now Executive Officer in the Office of the Executive for Reserve and ROTC Affairs, Department of the Army.

ties, class rooms and arms vault. Except for the office space and unit store rooms, the training facilities are shared by all units on a nightly basis.

These Army Reserve Training Centers are located as follows: Little Rock (2), Arkansas; San Francisco and San Jose, California; Gainesville and Miami, Florida; Macon, Georgia; Chicago (3) and Peoria, Illinois; Kansas City, Kansas; Louisville, Kentucky; Baton Rouge, Louisiana; Baltimore, Maryland; Grand Rapids, Michigan; Vicksburg, Mississippi; Kansas City, Missouri; Omaha, Nebraska; Albuquerque, New Mexico; New York City and Brooklyn, New York; Asheville and Winston-Salem, North Carolina; Cleveland and Youngstown, Ohio; Oklahoma City and Tulsa, Oklahoma; Salem, Oregon; Pittsburgh (2), Reading and Scranton, Pennsylvania; Providence, Rhode Island; Charleston, South Carolina; Nashville, Tennessee; Austin, Beaumont and Houston, Texas; Logan, Utah; Norfolk, Virginia; Olympia, Washington; Charleston, West Virginia; and Green Bay, Wisconsin.

In 1951 representatives of the six Army Areas met to develop plans for the latest type Reserve training centers—expansible training facilities which can accommodate 400, 600, 800, 1000 or 2000 men with the addition of extra wings to a basic floor plan. Another noticeable change has been the reduction of the drill or assembly area from about 7000 square feet to 3500 square feet. (See diagram, page 54.)

From recent appropriations, there are now under construction or completed twenty-nine of these new design training centers in the following locations:

First Army: Hartford and New Haven, Connecticut; Springfield and Worcester, Massachusetts; Trenton and Camden, New Jersey; Bronx-Yonkers, New York.

Second Army: Baltimore, Maryland; Toledo, Ohio; and Richmond, Virginia.

Third Army: Mobile, Alabama; Raleigh, North Carolina; Greenville, South Carolina; Chattanooga, Knoxville and Memphis, Tennessee.

Fifth Army: Lafayette and South Bend, Indiana; Topeka and Wichita, Kansas; Lansing, Michigan; Lincoln, Nebraska; Madison and Milwaukee (2), Wisconsin.

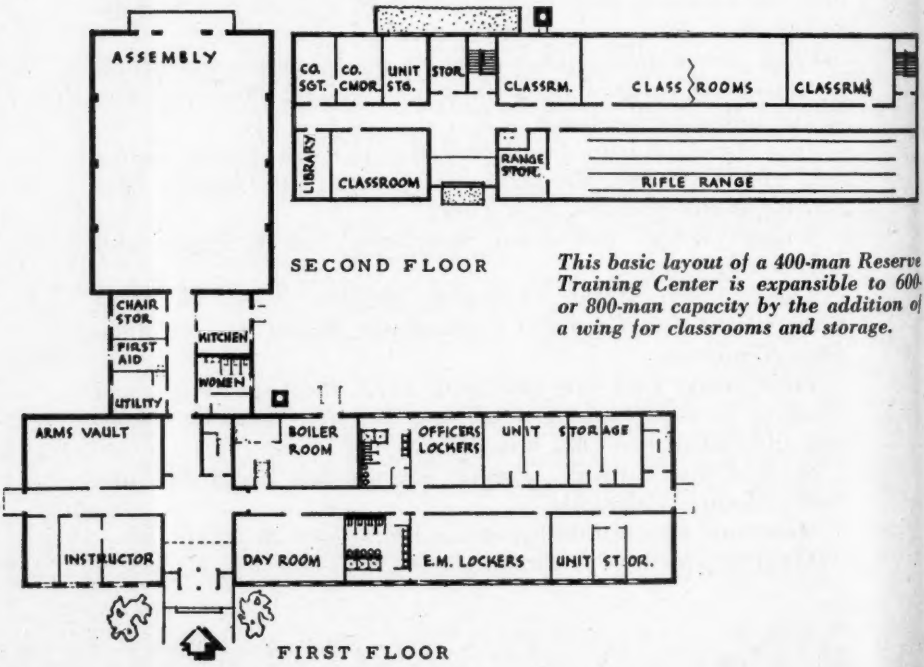
Sixth Army: Tucson, Arizona; Fresno, San Bernardino and Santa Monica, California.

Hindering the building program is the lack of suitable sites. The rapid growth of American cities during the past few years

has made it increasingly difficult to find desirable areas in major population centers. Delays have resulted from the fact that land cannot be purchased or acquired until the funds for construction have been released. In the 1951-52 construction program, funds were delayed until the new architectural plans for the expansible buildings were accepted. During the delay many available sites which had been selected in the early part of the fiscal year were sold or otherwise disposed of by their owners. This meant finding new sites before construction could begin.

Many communities, meanwhile, have done their best to help the program. They have either donated or leased to the Federal Government at a nominal figure for fifty years, land which would have been too expensive to purchase. In some cases this meant that the city itself first bought the land in order to lease it to the Government. In other cases, areas in city parks were made available. In fact, the program has received so much help on the local level that few sites have had to be purchased.

Land for the training centers also has been made available by colleges and universities. Though no authorization exists for the construction of Government facilities for use by educational institutions, many colleges and universities are conveniently located in cities or near centers of population and agreements have been made with some for the construction of Army Reserve



This basic layout of a 400-man Reserve Training Center is expansible to 600- or 800-man capacity by the addition of a wing for classrooms and storage.

training centers on their grounds. Under these agreements, use of the buildings has been authorized for the local ROTC unit on a non-interference basis. That is, since the Reserve units usually train at night and on week-ends, the ROTC utilizes the facilities during the day. Reimbursement is made by the college for a pro rata share of maintenance costs.

As an example, New York University offered land and approval was granted for a training center to be built in the Bronx-Yonkers area. This will work for the mutual benefit of the University and the Reserve training program. With a thousand students taking Infantry, Signal Corps and Corps of Engineers ROTC training, the University will have the use of the drill hall, additional classrooms, vehicle storage space and a rifle range. In turn, the Reserve units will find ex-servicemen in the student body interested in becoming active Reservists.

Some persons have objected to the Reserve building program on the grounds that the Reserve units ought to utilize existing National Guard armories. In every instance, the possibility of joint use is investigated, but there are several reasons why it is not always practical. One is the fact that Guard armories are often owned by the state and are used as sources of income by leasing them for concerts, displays and civic events. Often the local armory is the only building suitable for community social activities. Addition of Army Reserve training might create problems impossible to solve.

To find a solution to the joint use of existing Guard facilities under circumstances where no function would suffer at the hands of the other, it has been suggested that Guard armories be expanded. This procedure is explored wherever practicable but it, too, presents difficulties. Often there is no room for expansion and the adjacent property is too expensive for purchase. One of the most feasible plans is to construct initially for joint use by both the Guard and the Army Reserve. Today in many instances such joint utilization is planned.

While the completion of its building program will not solve all of the manpower problems of the Army Reserve Program, certainly few of the others can be solved without it. Adequate facilities are an important incentive to Reserve training. Show a Reservist that proper equipment and classroom space awaits him and he will be more inclined to enroll for active training.

"THIS IS THE FAR EAST NETWORK"

MASTER SERGEANT DAVID THOMAS

EVEN UNDER the most favorable circumstances, the average American serviceman in the Far East has a difficult time understanding what he sees and hears. He cannot decipher the native signs nor can he understand the language. But if he is near a radio, there is one thing he can always understand and enjoy, and that is the broadcast emanating from the nearest Troop Information Radio Station.

Almost any hour of the day or night he can tune in such programs as "Twenty Questions," "The Hit Parade," "Grand Ole Opry," "Bookshelf of the World" or "Sportscope." Besides these and many other standard American entertainment programs, he can listen to news broadcasts and information vital to his role as guardian of the peace for the free world.

Today the Far East Command operates two Troop Information networks in the area—the American Forces Korea Network (AFKN) and the Far East Network (FEN). The latter began operations eight years ago when the first transmitter was landed on Okinawa behind a contingent of Marines, ammunition and other supplies. Not long afterward this spokesman of the American invasion forces became the medium for information and entertainment of the occupation troops. Studios were in Radio Tokyo building, the old haunt of Tokyo Rose and other enemy propagandists. In August 1953 FEN vacated the station which it had been renting from the Japanese Broadcasting Corporation and moved into newly built facilities of its own at Camp Drake on the outskirts of Tokyo.

In addition to the studios at Camp Drake, FEN has seven other stations located at Sendai, Nagoya, Hokkaido, Iwakuni, Miho, Itazuki and Okinawa. It also has ten relay stations, two of them using short-wave lengths; JKL beamed to Korea, and JKI beamed the length of Japan and on to Okinawa.

MASTER SERGEANT DAVID THOMAS, USA, was formerly Program Director, Far East Network, Tokyo, Japan.

With its transmitters and studios relocated on American military reservations, FEN is rapidly returning property to the Japanese—a move which ultimately will produce a saving of approximately $400,000 annually in rentals.

Technical facilities at the new Camp Drake studios are top notch. Each of the two studios has console-type controls, three turntables and an intercommunication system for talk-back with the studio personnel. The master control room, nerve center of the whole network, has a custom-designed console with facilities for switching programs from the studios to the local transmitter and land lines leading to other stations. Five short-wave receivers are tuned to the West Coast of the United States to pick up programs transmitted from the Armed Forces Radio Service in Los Angeles, California. The recording room nearby, where some 250 discs are cut weekly for distribution to other FEN stations and to the American Forces Korea Network, has four disc recorders and three tape recorders.

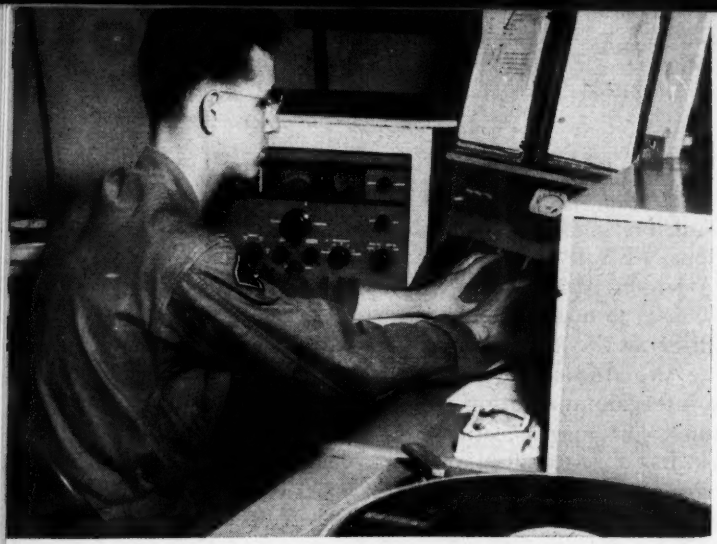
American Forces Korea Network stations are not nearly as complete. The Korean stations all began operating as mobile transmitters, capable of avoiding enemy artillery or bombing. Today there are nine such stations with all but two still using low-power transmitters.

Nevertheless, the type and quality of the programs is similar on both networks. They receive large quantities of recorded material produced in the studios of FEN at Camp Drake and also selected programs cut by AFRS in Los Angeles. The completed 16-inch records are dispatched by air mail directly to the stations. These platters permit servicemen overseas to keep up with such radio personalities as Bob Hope, Jack Benny and Doris Day. Two sides provide a full 30-minute program. A balanced variety of features is included in each weekly shipment.

Whether or not the networks use any or all of the material depends on local programming requirements. Normally more than half of FEN's program time consists of Far East Network and locally produced shows, either live or recorded. In a typical 126 hour broadcasting week, one half is of local origin. When changing conditions restrict production of local shows, a greater percentage of packaged programs is used.

The program hours are divided into periods of network and local time. Thus network programs are heard at the same hour on all stations. Local stations use the remaining time for programs suited to their particular audience.

In addition to providing decommercialized Stateside enter-

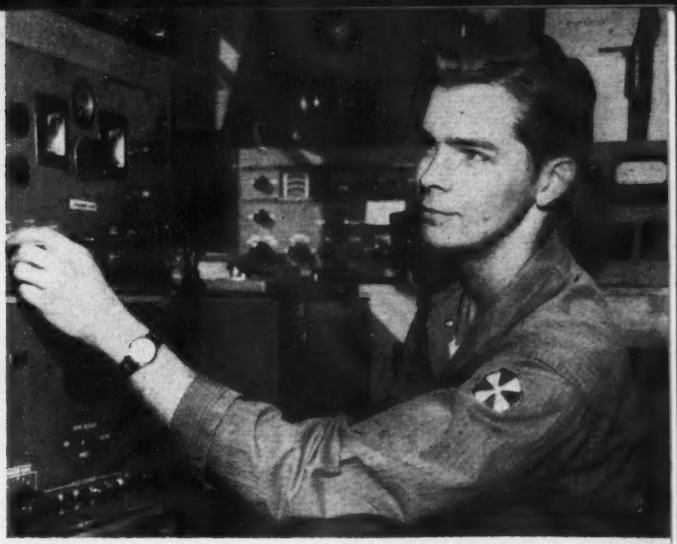


Broadcast volume and tone are regulated at this control panel of the American Forces Korea Network.
U. S. Army Photograph

tainment programs, the networks disseminate news and information. The ratio averages about 80 percent entertainment and 20 percent information and news. Information topics are prepared monthly by the Troop Information and Education Section of Headquarters, Army Forces, Far East. The Network production staff then dramatizes the theme in documentary form or presents it as spot announcements during station breaks. Supplementing this, AFRS in Los Angeles provides recorded material for information programming.

Often the most effective programs are those produced locally. One of the features of this type is "Far East Network Presents"—a series which grew from a weekly round-table discussion of command-level information topics. Produced in Tokyo, it is heard throughout the Far East each Wednesday evening as a dramatic presentation. Its purpose is to lead up to the weekly command conference topic so that listeners will have some advance knowledge of the material.

In still another locally produced program, listeners have heard chapters in the life of "Benny the Boot," by profession a talking pair of combat boots. Benny is a staunch supporter of cost consciousness and a fierce enemy of black market operators. The local information programs have included an interview with "Mrs. X," former resident of Red-held East Germany, and a talk with a corporal who abandoned the Red Army for a hitch with Uncle Sam. "The Big Jump," a dramatic script emphasizing the importance and responsibility of leadership, told of an airborne officer who regained lost confidence when he realized how much his men depended on him. Such stories written by servicemen in the network's continuity-production department, hit home to every soldier.



A soldier technician adjusts the short wave receiver in a mobile transmitter of American Forces Korea Network.
U. S. Army Photograph

Peak listening spots are given to newscasts. At 0530 the network's seven-man newsroom staff starts its nineteen-hour job of writing, editing and broadcasting the day's news to all parts of the Far East. Of the nine daily newscasts, three are fifteen minutes in length, one is a ten-minute program and the remaining five are five minutes each. In addition, two or three major headline items are announced during hourly station breaks. The Network signs off at midnight with a final one minute summary. Some stations, such as FEN Okinawa, carry on through the night, rounding out a twenty-four hour broadcasting day with local productions.

Besides the newscasts for listeners at large, a special service is provided for editors of unit newspapers and news bulletins. By short-wave, three hour-long newscasts go out at dictation speed so that editors can take the items for local publication.

High point of the week's reporting is "News Front, Far East," a thirty-minute news magazine of the air. This documentary gives its listeners the important news features of the week as reported by on-the-spot observers. Army, Navy, Marine Corps and Air Force correspondents present tape-recorded interviews, eyewitness accounts and narratives covering important events throughout the Far East.

Though Troop Information Radio Stations have no commercials, the networks do sponsor certain ideas. The military services are as interested in selling an awareness of cost consciousness, re-enlistment advantages and the relationship of military knowledge to national security as business men are in selling toothpaste and razor blades.

Comprehensive spot-announcement campaigns are conducted net-wide on such subjects as "Why We Fight," "Know Your Job," "Teamwork," "Prestige of the Combat Soldier" and similar

Soldiers taking part in a command post exercise on Hokkaido follow news reports broadcast by Far East Network. U. S. Army Photograph

topics prepared as a part of the Command's Monthly Troop Information Plan. Announcements are divided into two categories —network spots and local spots. The former are written at FEN headquarters and mailed to all stations for use during the month. Each local station is allotted additional time for announcements on topics developed by the area commander. Over fifty station breaks a day carry these spot announcements, just as commercials are used in the United States.

Fund raising campaigns like the March of Dimes, American Red Cross and Army Emergency Relief get much help from the network spots. The basic information material is supplied by the charities themselves, through the Troop Information staff, but local campaign production contributes to the drives' success. During the 1952 March of Dimes campaign, stations ran request marathons, playing tunes in response to pledges of donations. Kyushu, FEN, with transmitters serving southern Japan, raised over $100,000 in its marathon, while the station on Hokkaido received $65,000. A year later AFKN sparked the polio drive in Korea with a marathon that lasted for twelve days and all but exhausted staffers of the eight stations participating. Their efforts raised over $87,741 for the March of Dimes.

Opinions on duty in the Far East run a wide gamut among American troops stationed there. Perhaps the nearest approach to unanimity is found whenever the Far East Network or the American Forces Korea Network is mentioned. Eyes light up, and again and again the comment is heard—"It's just like home."

RECENT LEGISLATION OF MILITARY INTEREST

LEGISLATION of military interest enacted during the first session of the 83d Congress (January-August 1953) includes:

Temporary Limitation on Officer Strength. (Public Law 7—83d Congress.) Limits commissioned officer personnel on active duty in the Armed Forces (excluding Reserve officers on active duty for training or Reserve officers ordered to active duty for periods of 30 days or less) to the following numbers in each grade, as of 30 June 1953:

Ranks	*Army*	*Navy*	*Marine Corps*	*Air Force*
General of the Army or Fleet Admiral of the Navy	4	3	0	0
General or Admiral	8	6	1	7
Lieutenant General or Vice Admiral	27	24	4	19
Major General or Rear Admiral	172	128	23	161
Brigadier General or Rear Admiral	297	128	31	222
Colonel or Navy Captain	5,199	2,987	546	4,351
Lieutenant Colonel or Commander	13,230	7,096	1,186	8,602
Major or Lieutenant Commander	18,075	10,911	2,522	21,454

This Act repeals the limitations imposed by Section 634 of the Department of Defense Appropriation Act for Fiscal Year 1953 (Davis amendment) and substitutes the revised totals listed above.

Free Postage. (Public Law 9—83d Congress.) Extends to 30 June 1955 free first class mail privileges to members of the Armed Forces serving in Korea or other combat zones.

Duty Free Gift Privilege Extended. (Public Law 19—83d Congress.) Extends to 1 July 1955 the existing privilege permitting members of the Armed Forces overseas to send gifts to friends or relatives duty free.

Duty Exemption on Household Goods. (Public Law 20—83d Congress.) Extends until 1 July 1955 the period during which personal and household effects brought into the United States under Government orders shall be exempt from duty.

Limitation Upon the Detail of Officers to Recruiting and ROTC duty. (Public Law 35—83d Congress.) Amends section 40(b) of the National Defense Act, as amended, so that officers

on active duty may be assigned to recruiting or ROTC duty without the limitation of having first to secure retired personnel if available.

Appointment of Nurses and Medical Specialists in the Armed Forces. (Public Law 37—83d Congress.) Amends the Army-Navy Nurses Act of 1947 to raise the age limit for original appointment of nurses and women medical specialists in the Regular Army and Regular Air Force to age 27 for second lieutenants and age 30 for first lieutenants. Age limits for appointment of nurses in the Regular Navy are raised to age 27 for ensigns, and age 30 for lieutenants (junior grade). These maximum ages are increased by the period of active Federal commissioned service performed after 31 December 1947 up to a maximum of five years credit.

Status of Commissioned Officers and Warrant Officers Listed as Missing in Action. (Public Law 39—83d Congress.) Authorizes the President to continue in effect the appointments of officers and warrant officers currently in a status of missing in action or captured until such persons are released from active duty.

Induction of Medical Specialists. (Public Law 84—83d Congress.) Amends the Universal Military Training and Service Act, as amended, to provide for induction of certain medical, dental and allied specialists until 1 July 1955. The new termination date coincides with the date upon which the authority to induct non-specialists under the Universal Military Training and Service Act expires.

Naturalization of Non-Citizen Members of the Armed Forces. (Public Law 86—83d Congress.) Provides for the naturalization of non-citizens who have served or are serving in the Armed Forces of the United States for a period of not less than 90 days after 24 June 1950. The Act expires 30 June 1955.

National Housing Act and Servicemen's Readjustment Act Amended. (Public Law 101—83d Congress.) This Act makes the maximum interest rates for the various mortgage insurance programs under the National Housing Act consistent with each other and revises the maximum interest rate on direct veteran home loans under the Servicemen's Readjustment Act of 1944 so as to conform to the maximum interest rate for guaranteed loans under the Act; it also clarifies the Veterans Administrator's authority to vary the rates below the maximum as well as up to the maximum of 4½ percent (with the approval of the Secretary of the Treasury) and extends the direct home loan program for one additional year, to 30 June 1954.

Wearing of Uniforms by Honorably Discharged Persons. (Public Law 104—83d Congress.) Authorizes the President to prescribe by regulation the occasions upon which persons who served in the Armed Forces in time of war and have been honorably discharged may wear their former uniforms.

Display of Flags of Other Nations or Organizations. (Public Law 107—83d Congress.) Prohibits the display of flags of international organizations or other nations in equal or superior prominence to the flag of the United States anywhere within the boundaries of the United States or its territories or possessions. An exception is made in the practice of displaying the United Nations flag in a position of superior prominence or honor and other national flags in positions of equal prominence or honor, with that of the United States flag at the headquarters of the United Nations.

Mutual Security Act of 1953. (Public Law 118—83d Congress.) Authorizes appropriations for continuing military, economic and technical assistance to foreign nations under the Mutual Security Program.

Civil Service Eligibility for Veterans. (Public Law 121—83d Congress.) Provides benefits for persons who served in the Armed Forces after 30 June 1950, with respect to Civil Service appointments, rates of compensation and seniority rights which such veterans lost because of entering the Armed Forces.

Discharge by Purchase Repealed. (Public Law 123—83d Congress.) Repeals existing authority which permitted enlisted personnel to purchase discharge from the military or naval service.

Retirement of Non-Regular Officers of the Army and Air Force. (Public Law 126—83d Congress.) Authorizes voluntary retirement privileges to non-Regular officers of the Army and Air Force having more than 30 years of active Federal service.

Savings Deposits Extended. (Public Law 128—83d Congress.) Extends the wartime authority which allows enlisted personnel of the Army and Air Force to obtain refunds prior to date of final discharge of any sums deposited by them with the Finance Department. The Act also removes the requirement that amounts deposited as savings are forfeited in the event of desertion.

Automatic Renewal of Expiring Five-Year-Level-Premium-Term Policies. (Public Law 148—83d Congress.) Provides for the automatic renewal of expiring 5-year-level-premium-term policies of United States Government Life Insurance (World War I) and National Service Life Insurance (World War II and Korea).

Visas for Alien Orphans. (Public Law 162–83d Congress.) The Act expedites the admission as special nonquota immigrants of not more than 500 alien children under 10 years of age, adopted by United States citizens who are serving overseas in the Armed Forces or who are employed abroad by the United States Government.

Military Personnel Claims Act Extended. (Public Law 177–83d Congress.) Extends the scope of the Military Personnel Claims Act to permit filing of claims not later than two years after peace is established "or the armed conflict terminates."

Exchange Sales to Civilian Employees. (Public Law 236–83d Congress.) Authorizes Army, Navy and Air Force stores overseas or in Alaska, and at certain areas in the United States where private sources are not available, to sell goods to civilian employees of the Government residing within the military establishment.

Retirement Compensation Plan. (Public Law 239–83d Congress.) Permits personnel of the uniformed services—Army, Navy, Marine Corps, Air Force, Coast Guard, Coast and Geodetic Survey and Public Health Service—to elect certain contingency options which will enable them to share their retirement compensation with their widows and children. In order to do so, the retired individual elects to receive a reduced amount of retired compensation during his lifetime in order to provide annuities for his surviving widow and minor children.

College ROTC Credit for Secondary School Training. (Public Law 244–83d Congress.) Amends the National Defense Act to provide that certain military training received in secondary schools in the junior division, Reserve Officers Training Corps, may be credited toward completion of the two academic years of service in the senior (college level) division of the Reserve Officers' Training Program.

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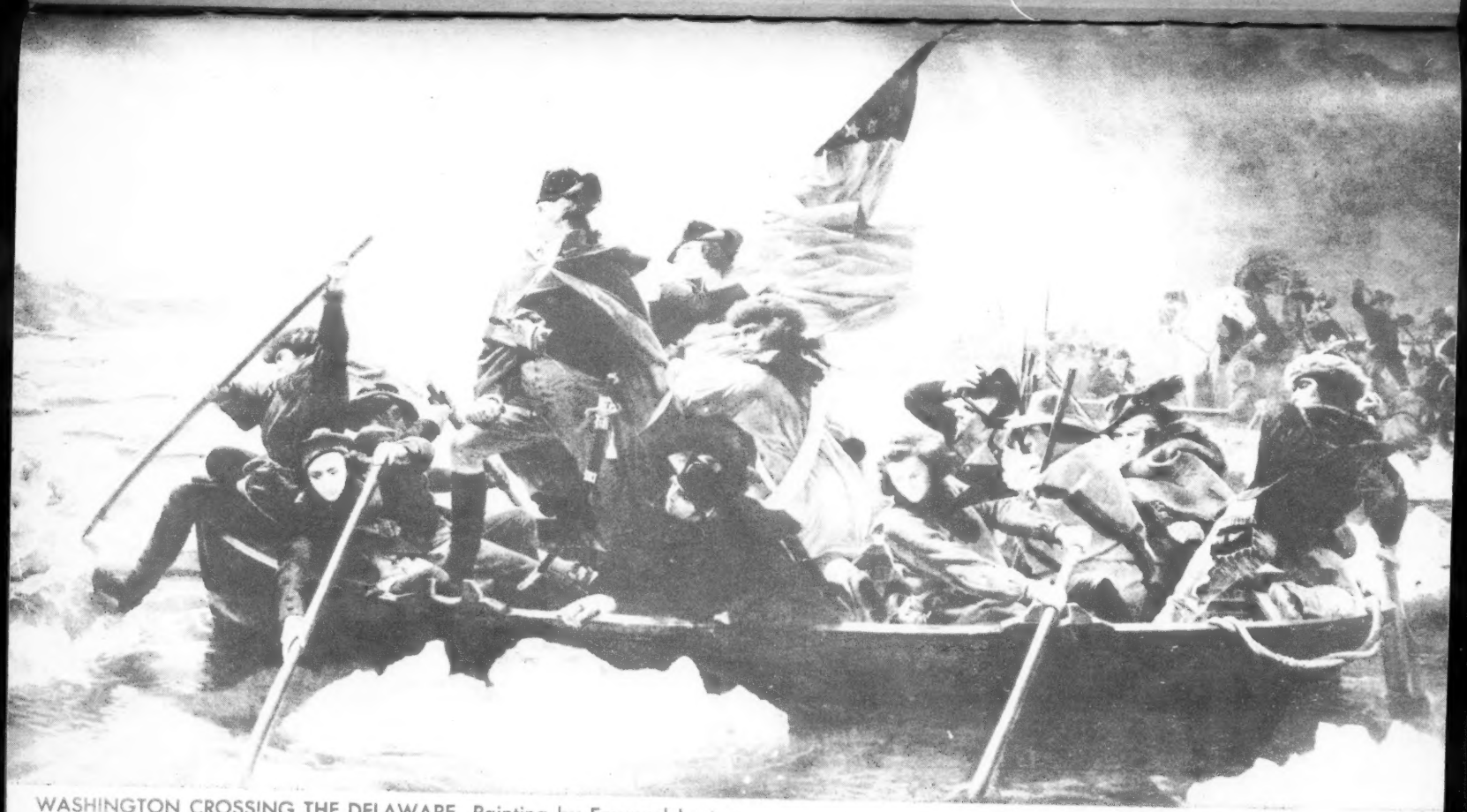

WASHINGTON CROSSING THE DELAWARE—Painting by Emanuel Leutze

National Archives Photograph